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**National Highway
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Division of Arvin/Calspan
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CALSPAN ON-SITE AIR BAG DEPLOYMENT INVESTIGATION
CALSPAN CASE NO. 92-22
VEHICLE - 1991 MERCURY GRAND MARQUIS LS
LOCATION - [REDACTED], AL
ACCIDENT DATE - [REDACTED], 1992

Contract No. DTNH22-87-C-27169

Prepared for:

U.S. Department of Transportation
National Highway Traffic Safety Administration
Washington, D.C. 20590

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points are coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

TECHNICAL REPORT STANDARD TITLE PAGE

1. Report No. 92-22		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle Calspan On-Site Air Bag Deployment Investigation Vehicle - 1991 Mercury Grand Marquis Location - ██████████, AL				5. Report Date ██████████, 93	
				6. Performing Organization Code	
7. Author(s) Accident Research Group				8. Performing Organization Report No.	
9. Performing Organization Name and Address Transportation Sciences Center Accident Research Group Division of Arvin/Calspan ██████████, ██████████				10. Work Unit No. ██████████(██████████)	
				11. Contract or Grant No. DTNH22-87-C-27169	
12. Sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Administration Washington, D.C. 20590				13. Type of Report and Period Covered Technical Report Accident Date ██████████ 92	
				14. Sponsoring Agency Code	
15. Supplementary Notes On-site investigation of an air bag deployment crash that resulted in multiple fractures of the driver's right forearm.					
16. Abstract <p>This investigation focused on an intersection crash that involved a 1991 Mercury Grand Marquis that was equipped with a driver's side air bag Supplemental Restraint System. The vehicle sustained a 10 o'clock direction of force impact and underwent a velocity change of 24 KPH (15 mph). The driver was a 73-year-old female with a height of 149.9cm (59") and weight of 56.3kg (125 lbs.). She was wearing the manual 3-point lap and shoulder belt system.</p> <p>At impact, the driver was initiating a left turn and her right hand was positioned at the 11 o'clock sector of the wheel with her forearm extending over the air bag module. As the SRS deployed, the upper air bag module cover flap and air bag impacted her right forearm resulting in AIS-3 level fractures of the radius and ulna and a 340° laceration of the forearm. In addition to the forearm injury, the driver also sustained a fractured right olecranon (AIS-2) and a fractured right 5th digit from air bag contact.</p>					
17. Key Words Front-to-side impact configuration Sufficient longitudinal deceleration Air bag deployment Multiple segmented open fractures of the forearm				18. Distribution Statement General Public	
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 153	
				22. Price	

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CALSPAN ON-SITE AIR BAG DEPLOYMENT INVESTIGATION
CALSPAN CASE NO. 92-22
VEHICLE - 1991 MERCURY GRAND MARQUIS LS
LOCATION - [REDACTED] AL

SUMMARY

This crash occurred at an urban 4-leg intersection in [REDACTED], AL on [REDACTED], 1992, during daylight hours. The asphalt road surfaces were dry and the posted speed limit was 48 KPH (30 mph). The involved vehicles were a 1991 Mercury Grand Marquis that was equipped with a driver's air bag Supplemental Restraint System and a 1977 Chevrolet Nova, 2 dr. sedan.

The Grand Marquis was owned and driven by a 73-year-old female with a height of 149.9cm (59") and weight of 56.3kg (125 lbs.). She was traveling in a westerly direction on a two-lane local street as she approached the four-leg intersection. The driver stopped for a stop sign and initiated a left turn onto the four lane roadway. A parked vehicle at the southeast corner of the intersection obstructed the driver's view of the approaching northbound Chevrolet Nova. The driver of the 1977 Chevrolet Nova detected the Grand Marquis as it initiated the left turn and braked in an attempt to avoid impact.

The full frontal area of the Chevrolet Nova impacted the left front side area of the Grand Marquis in a L-configuration impact sequence. The Nova sustained 36.8cm (14.5") of maximum crush located at the right corner of the front bumper. Crush values at bumper level were as follows: $C_1 = 7.6\text{cm}$ (3.0"), $C_2 = 8.9\text{cm}$ (3.5"), $C_3 = 15.9\text{cm}$ (6.25"), $C_4 = 22.9\text{cm}$ (9.0"), $C_5 = 27.9\text{cm}$ (11.0"), $C_6 = 36.9\text{cm}$ (14.5"). Direct contact damage on the left side of the Grand Marquis began on the corner of the front bumper 92.1cm (36.25") forward of the left front axle position and extended 184.2cm (72.5") rearward onto the front third area of the left front door. Maximum crush was 30.2cm (11.9") located on the left front fender directly above the axle position. Crush values on the left side of the vehicle were as follows: $C_1 = 6.4\text{cm}$ (2.5"), $C_2 = 20.6\text{cm}$ (8.1"), $C_3 = 24.6\text{cm}$ (9.7"), $C_4 = 27.3\text{cm}$ (10.75"), $C_5 = 22.9\text{cm}$ (9.0"), $C_6 = 3.2\text{cm}$ (1.25"). Resultant directions of force were within the 1 o'clock sector (CDC: 01-FDEW-2) for the Chevrolet Nova and 11 o'clock (CDC: 11-LYEW-3) for the air bag equipped Grand Marquis. Velocity changes were computed by the damage and trajectory mode of the CRASHPC program at 24 KPH (15 mph) for the Grand Marquis with a longitudinal component of -21 KPH (-13 mph) while the Nova underwent a total speed change of 29 KPH (18 mph). As a result of the front-to-side impact sequence, the supplemental driver's air bag system deployed in the Grand Marquis.

SUMMARY (CONT'D.)

The impact rotated the vehicles in opposite directions which resulted in a subsequent sideslap impact involving the left side of the Marquis and the right side area of the Chevrolet Nova. The vehicles traveled approximately 15.2m (50') before coming to rest in a side-by-side orientation at the northwest quadrant of the intersection.

The driver of the Mercury Grand Marquis was in a normal driving position at impact. The vehicle was equipped with a 6-way power seat that was adjusted to a forward position, 10.2cm (4") from full forward. The seat was also set to the full up position with the seat back adjusted to the full forward position. The driver stated that she typically drove the vehicle with the tilt wheel set slightly below the center position. (At the time of our on-site inspection of the vehicle, the column was adjusted to the center position.) The driver was properly wearing the manual 3-point lap and shoulder belt system. Although no loading evidence was visible on the belt system, restraint usage was determined from driver statements and blood on the belt webbing in the vicinity of the latchplate/buckle assembly. The driver stated that she always drove the vehicle with both hands on the steering wheel rim. As she initiated the left turn, her right hand was probably at the 11 o'clock position with her forearm extending across the air bag module.

At impact, the driver's air bag system deployed. The upper module flap contacted the anterior and lateral aspect of her mid right forearm. There was no visible contact evidence (i.e., tissue transfers) on the upper flap. The deploying air bag subsequently contacted the same area of the forearm. As a result of air bag and module flap contact, the driver sustained multiple segmental open fractures of the right radius and ulna, with fractures of both the distal and proximal ulna (AIS-3) and a circumferential degloving laceration involving the skin and subcutaneous tissue down to the muscle layer which involved approximately 340° of the forearm. The contact sequence also fractured the right olecranon (AIS-2). The driver sustained a fracture of the proximal phalanx of the right fifth digit from probable contact with the expanding air bag.

The expanding air bag displaced the driver's right arm up and over her head in a circular pattern. Tissue and blood spatters were noted to the headliner, left B-pillar and siderail areas, and across the full width of the rear seatback. The driver, who is a retired nurse, remained conscious and coherent throughout the event and stated during the Calspan interview that her arm "looked like a piece of frayed sausage." She slid to the center seated position and waited for rescue personnel to arrive on-scene.

SUMMARY (CONT'D.)

The driver was transporting her two small grandchildren, ages 4 and 6, who were seated in the center front and right front seat respectively. They were properly belted by the available restraints and were not injured.

As previously stated, the upper air bag module flap did not yield contact evidence. The flap, which measured 20.3cm (8") in width x 12.4cm (4 7/8") in height x .7cm (9/32") in thickness, opened at the designated tear point and remained attached to the module assembly. The lower air bag module flap also opened at the designated tear point and measured 20.3cm (8") in width x 3.5cm (1 3/8") in height x .7cm (9/32") in thickness. Both flaps were extremely clean and free of tissue and blood deposits.

The air bag was typical in construction and was vented by two 2.5cm (1") ports located on the back side of the bag (away from the driver) at the 2 and 8 o'clock positions. The bag was tethered by four internal tether straps and a 17.8cm (7") octagonal reinforcement sewn to the center of the bag. There were large blood stains at the lower left and right quadrants of the bag. Examination of the bag with a 8X magnifying lens yielded tissue transfers located at the lower right quadrant of the bag. Small tissue deposits were noted 16.5cm (6.5") right of the bag's centerline and 3.8cm (1.5") below the horizontal centerline and 15.2cm (6") right and 18.4cm (7.25") below the referenced horizontal line.

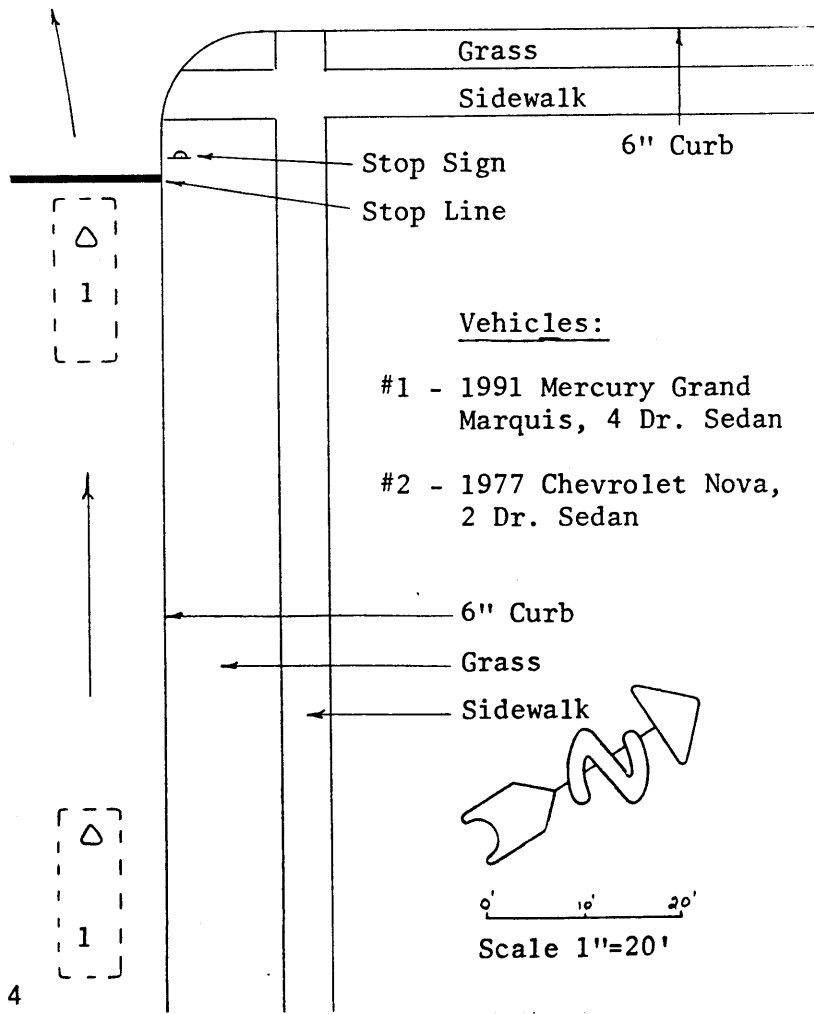
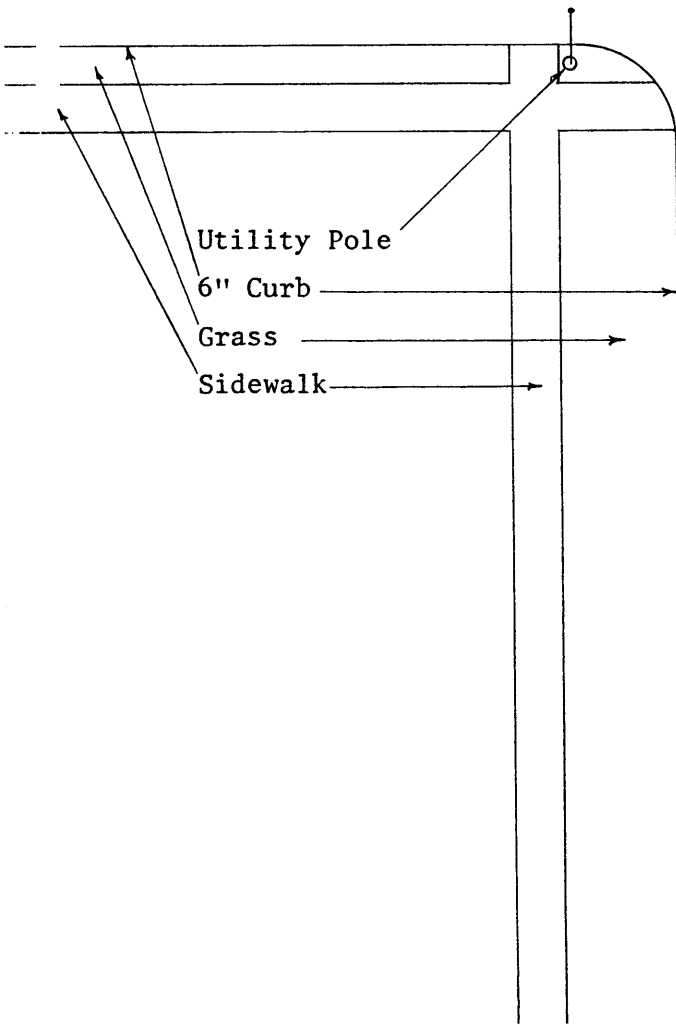
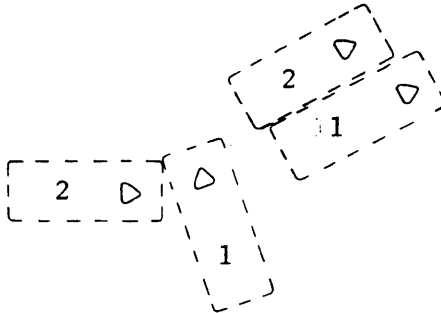
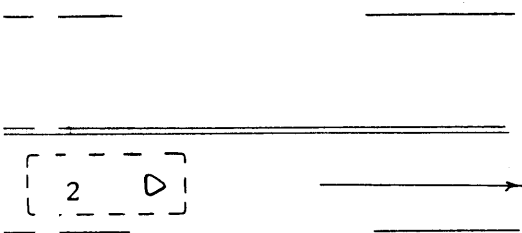
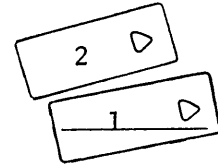
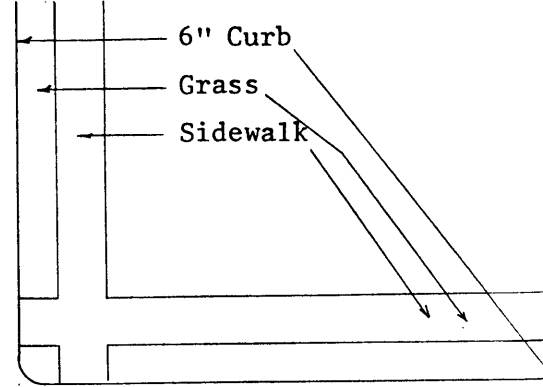
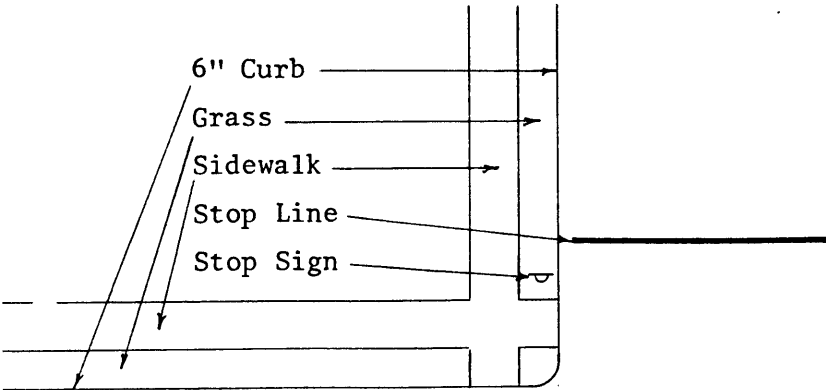
The TRW manufactured air bag module assembly was identified by the following numbers:

[REDACTED]

The air bag and module cover flaps were not damaged and appeared to have deployed in a normal sequence. There was generant residue on the filtering screens of the radial ports of the inflator assembly from the 12-6 o'clock positions, extending in a clockwise direction.

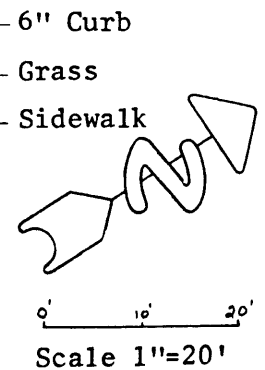
There was no additional interior damage to the vehicle; therefore, the injury to the driver's right forearm was caused by the deployment of the air bag. Both the large upper flap and air bag probably contributed to the severity of the injury.

Accident Schematic
Calspan Case No. 92-22



Vehicles:

- #1 - 1991 Mercury Grand Marquis, 4 Dr. Sedan
- #2 - 1977 Chevrolet Nova, 2 Dr. Sedan



0' 10' 20'
Scale 1"=20'

CALSPAN ON-SITE AIR BAG DEPLOYMENT INVESTIGATION
CALSPAN CASE NO. 92-22
VEHICLE - 1991 MERCURY GRAND MARQUIS
LOCATION - [REDACTED] AL

CRASH DATA

Location: 4-leg intersection
City/Township: [REDACTED], AL
Area/Type: Urban/Residential
Crash Date/Time: [REDACTED] 1992, daylight hours
Investigating Police Agency: [REDACTED] Police Department
Accident Type: Car/Car, front-to-side impact configuration
Air Bag Vehicle Driver Injury Severity: Serious (AIS-3)

AMBIENCE

Viewing Conditions: Daylight
Weather: Clear
Precipitation: None
Road Surface: Dry

HIGHWAY

	<u>Air Bag Vehicle</u>	<u>Vehicle #2</u>
Type:	Local street	Minor arterial
Number of Lanes:	2	4
Width:	9.4m (31')	17.2m (56'6")
Surface:	Asphalt	Asphalt
Median:	None	None


HIGHWAY (CONT'D.)

Edge:	North edge - 15.2cm (6") barrier curb	East edge - Parking lane and 15.2cm (6" barrier curb
	South edge - 15.2cm (6") barrier curb	West edge - Parking lane and 15.2cm (6") barrier curb
Vertical Alignment:	10.5% grade, positive to the west	3.5% grade, positive to the north
Horizontal Alignment:	Straight	Straight
Estimated Coefficient of Friction:	.75	.75
Traffic Density:	No other traffic	Light

TRAFFIC CONTROLS

Signals:	None	None
Signs:	Stop sign at northeast corner of intersection	None
Markings:	Solid white stop line	Double yellow centerlines, broken white lane lines
Speed Limit:	48 KPH (30 mph)	48 KPH (30 mph)

VEHICLES

	<u>Air Bag Vehicle</u>	<u>Vehicle #2</u>
Description:	1991 Mercury Grand Marquis LS, 4 dr. sedan	1977 Chevrolet Nova, 2 dr. sedan
VIN:	2 M E C M 7 5 F 1 M X (production number deleted)	1X27D7W (production number deleted)
Date of Manufacture:	 1990	Unknown
Color:	Gray	Blue
Odometer:	8 cylinder, 5.0 liter	6 cylinder, 4.1 liter (250 C.I.D.)
Transmission:	4-speed automatic, overdrive, column mounted transmission selector lever	3-speed automatic, column mounted transmission selector lever
Steering:	Power-assisted	Power
Brakes:	Power front-disc, rear drum	Power front-disc
Padding:	Upper and mid-instrument panel, soft edged steering wheel rim and air bag module cover, sun visors, headliner, door panels, door armrests, fold-down center armrests, adjustable head restraints	Upper and mid-instrument panel, soft edged steering wheel rim and spokes (not O.E.M. wheel), door panels, door armrests, adjustable head restraints

VEHICLES (CONT'D).

M a n u a l Restraints:	3-point lap and shoulder belt systems in the four outboard seated positions, center front and center rear lap belt	3-point lap and shoulder belts in the front outboard seated positions, center front lap belt, 3 rear seat lap belts
A u t o m a t i c Restraints:	Driver-side air bag S u p p l e m e n t a l Restraint System that deployed as a result of the initial impact sequence with vehicle #2	None
Defects:	None	None
Tow Status:	Towed due to vehicle damage	Towed due to vehicle damage

VEHICLE DAMAGE

Exterior:

Primary - The 1991 Mercury Grand Marquis was struck on the left front side area by the full frontal area of vehicle #2. Direct contact damage began at the corner area of the front bumper and extended 184.2cm (72.5") rearward across the left front fender, left front tire and wheel, and onto the left front door. The impact force against the left front tire and wheel fractured the upper ball joint stud at the base of the control arm. Maximum crush was 30.2cm (11.9") located on the left front wheel opening directly above the axle position. Crush values at this level were as follows: $C_1 = 6.4\text{cm}$ (2.5"), $C_2 = 20.6\text{cm}$ (8.1"), $C_3 = 24.6\text{cm}$ (9.7"), $C_4 = 27.3\text{cm}$ (10.75"), $C_5 = 22.9\text{cm}$ (9.0"), $C_6 = 3.2\text{cm}$ (1.25").

Damaged components included the front bumper, left headlamp and turn signal assembly, left front fender, hood, left front hub cap and ball joint, left A-pillar, and left front door. The displacement of the A-pillar cracked the vehicle's windshield and displaced the left roof side rail vertically upward from the A- to the B-pillar.

VEHICLES (CONT'D.)

Secondary - The left side area of the Grand Marquis impacted the right side of vehicle #2 in a subsequent sideslap configuration. Direct contact damage began at the mid portion of the left front door, 188cm (74") forward of the left rear axle, and extended 308cm (121.25") rearward onto the left taillamp lens. The damage consisted of superficial dents and paint transfers that extended across both left doors and the quarter panel. Maximum crush was 2.5cm (1") at various points on the left front door. There was a 1.25cm (0.5") dent at the rub strip on the left rear door. The sideslap sequence damaged both left side doors, the quarter panel, and the taillamp lens. There was no induced damage from the secondary collision.

CDC: Primary - 10-LYEW-3
Secondary - 09-LZEW-1

Repair Cost: Total loss

Interior:

The interior of the Mercury Grand Marquis was reduced in size by intrusion of the lower left A-pillar. The initial impact sequence displaced the pillar resulting in 7.6cm (3") of lateral displacement of the pillar, left front door panel, and side panel (forward of A-pillar).

The driver was wearing the manual 3-point lap and shoulder belt system. Although no loading evidence was visible on the belt webbing, blood stains were noted to the shoulder belt webbing in the area of the latchplate. Faint blood and tissue deposits were also visible on the webbing at the D-ring area.

The deploying air bag and upper module cover flap contacted the right forearm of the driver. No contact evidence was visible on the flap, however, tissue fragments were noted to the lower right quadrant of the bag. The bag displaced the driver's right arm up and over her head in a circular motion. Blood and tissue fragments were spattered onto the left upper B-pillar, left side window glass, left side rail, and the headliner. The spatter began of the side rail 20.3cm (8") rearward of the A-pillar and extended laterally 34.3cm (13.5") onto the padded headlines. Tissue and body fluid were also spattered across the full width of the rear seat back. The driver's arm then came to rest on her lap and bled onto the deployed air bag, seat cushion and center front lap belt webbing. Blood stains were also noted to the right seat cushion and occurred after the child occupants were removed from the vehicle, prior to EMT arrival.

The lateral aspect of the driver's left knee contacted the left door armrest, however, no damage occurred to the component. The center and right front occupants did not contact interior components and were not injured.

VEHICLE DAMAGE

Vehicle #2

Exterior:

Primary - The 1977 Chevrolet Nova sustained moderate frontal damage from its impact sequence with the left side of the Grand Marquis. Maximum crush was 36.8cm (14.5") located at the right corner of the front bumper. Direct contact damage was 170.2cm (67") in length and was distributed across the full frontal width of the vehicle. Crush values at bumper level were as follows: $C_1 = 7.6\text{cm}$ (3"), $C_2 = 8.9\text{cm}$ (3.5"), $C_3 = 15.9\text{cm}$ (6.25"), $C_4 = 22.9\text{cm}$ (9.0"), $C_5 = 27.9\text{cm}$ (11.0"), $C_6 = 36.8\text{cm}$ (14.5").

Components damaged by the frontal impact sequence included the bumper, grille, both headlamp assemblies, hood, both frame rails, radiator support panel, and the left and right front fenders. The frontal structure was displaced laterally to the left, indicative of the 1 o'clock impact force.

Secondary - Following the initial impact, the Chevrolet Nova engaged in a subsequent sideslap collision with the left side of the Grand Marquis. The sideslap produced minor damage to the right side of the Nova, beginning on the right fender 20.3cm (8") forward of the front axle. The damage, which consisted of superficial body deformation and paint transfers, extended 291.5cm (114.75") rearward onto the rear quarter panel, ending 10.2cm (4") forward of the rear axle. Maximum crush was 1.3cm (0.5") located at the leading edge of the right front door. Damaged components were limited to the fender, door, and quarter panel.

CDC: Primary - 01-FDEW-2
 Secondary - 03-RDEW-1

Repair Cost: Total loss

VEHICLE DAMAGE (CONT'D)

Vehicle #2

Interior:

The Chevrolet Nova was locked at the time of our inspection and there were no keys available; therefore, interior damage documentation was limited to visual observations. The driver did not wear the available 3-point restraint system. He initiated a forward trajectory and loaded the steering assembly and the windshield. His forehead impacted and cracked the laminated windshield 23-28cm (9-11") left of center and 25-33cm (10-13") above the base of the glass. In addition to being cracked, the driver's head contact bowed the glass outward 2.5cm (1"). The driver's chest area loaded and deformed the steering wheel, displacing the left upper quadrant of the rim 7.6-10.2cm (3-4") forward. The vehicle was equipped with a four spoke sport type wheel from a later model GM product. The wheel was not original equipment.

There was no intrusion or damage to interior components from exterior deformation. Both doors appeared to be in operational condition.

SUPPLEMENTAL RESTRAINT SYSTEM

The 1991 Mercury Grand Marquis was equipped with a driver's side air bag Supplemental Restraint System (SRS) that deployed as a result of the front-to-side impact sequence with vehicle #2. The system consisted of three front mounted crash sensors, a safing sensor and diagnostic unit, a knee bolster, and the air bag module assembly. Two of the crash sensors were mounted to the outboard aspect of the radiator support panel, located behind the low beam headlamp assemblies. The third crash sensor was mounted to a bracket forward of the air conditioning condensor at the center of the vehicle, directly behind the grille. There was no damage to the crash sensors or associated wiring; however, the left sensor was rotated slightly in a clockwise direction due to exterior sheetmetal deformation.

The knee bolster was not damaged or deformed from exterior deformation or driver contact. The safing sensor and diagnostic unit were not damaged. Although the crash occurred 6 months prior to our inspection of the vehicle, the battery had sufficient power to test the post-crash status of the air bag indicator lamp. The lamp was located on the left side of the speedometer cluster, directly above the odometer. With the key turned to the run position, the air bag indicator lamp flashed continuously. This test was repeated several times and yielded the same results.

SUPPLEMENTAL RESTRAINT SYSTEM (CONT'D.)

The air bag module deployed in a typical sequence. The module cover flaps opened at the designated tear points and were hinged at the 12 and 6 o'clock positions of the module assembly. The upper flap measured 20.3cm (8") in width x 12.4cm (4 7/8") in height while the smaller lower flap had respective measurements of 20.3cm (8") x 3.5cm (1 3/8"). Both flaps were 0.7cm (9/32") in thickness. There was no evidence of driver contact on the flaps (i.e., tissue, blood, or fabric transfers). At the time of our inspection, the upper air bag module cover flap was tucked under the upper steering wheel rim. The steering wheel rim deformed the center edge of the upper flap. The crease was not a result of flap contact with the driver's forearm.

The air bag was constructed of a woven nylon fabric with a neoprene liner. The bag, in its deflated state, measured 61cm (24") in diameter and was tethered by four internal straps that extended from a 17.8cm (7") octagonal reinforcement that was sewn to the center of the bag. The air bag was vented by two 2.5cm (1") diameter ports located on the back side of the bag (away from driver) at the 2 and 8 o'clock positions. There was no damage or tears to the deployed air bag. The radial inflator ports of the inflation module were inspected through the bag's venting ports. There were small deposits of generant residue on the filtering screens of the ports from the 12-6 o'clock positions, extending in a clockwise direction.

The face of the air bag had two large blood stains at the lower left and lower right quadrants. The stain at the lower left quadrant of the bag was faint in color and appeared to have been saturated by rain water. The stain on the right side of the bag began at the upper right corner of the tether reinforcement and continued to the lower right portion of the bag. The bag was examined with an 8X magnifying lens which revealed small tissue transfers at the lower right quadrant of the bag. The tissue fragments were located 16.5cm (6.5") right of center and 3.8cm (1.5") below the horizontal centerline and 15.2cm (6") right and 18.4cm (7.25") below the referenced centerline.

The air bag module assembly was manufactured by TRW and was identified by the following numbers:

[REDACTED]

VEHICLE VELOCITY ESTIMATES

	<u>Air Bag Vehicle</u>	<u>Vehicle #2</u>
Travel Speed:	Accelerating from a stopped position	56 KPH (35 mph), Driver estimate
Total ΔV :	24 KPH (15 mph)	29 KPH (18 mph)
Longitudinal ΔV :	-21 KPH (-13 mph)	-27 KPH (-17 mph)
Lateral ΔV :	12 KPH (8 mph)	-10 KPH (-6 mph)
E n e r g y Absorption:	50324 joules (37112 ft.lbs.)	49927 joules (36819 ft.lbs.)

The above velocity changes were computed by the damage algorithm of the CRASHPC program.

COLLISION SEQUENCE

Pre-Crash:

The driver of the air bag equipped Mercury Grand Marquis was transporting her grandchildren to her residence and was traveling in a westerly direction on a two lane city street. The street had a positive grade of 10.5% and a posted speed limit of 48 KPH (30 mph). The driver was decelerating as she ascended the grade on her approach to a four-leg intersection. East/westbound traffic flow through the intersection was controlled by stop signs. The driver stopped at the mouth of the intersection to check for north and southbound traffic. There were several parked vehicles along the east curbline of the intersecting roadway which obstructed the driver's view of northbound traffic.

COLLISION SEQUENCE (CONT'D.)

Vehicle #2 was traveling in a northerly direction on the inboard travel lane at a driver estimated speed of 56 KPH (35 mph) as he approached the intersection. The driver of the Grand Marquis failed to detect the approaching vehicle and accelerated into the intersection and initiated a left turn across vehicle #2's path of travel. The driver of vehicle #2 noted the left turning vehicle as it emerged from in front of the parked vehicle and entered his path of travel. He subsequently braked (no lockup) in an attempt to avoid the collision.

Crash:

The full frontal area of vehicle #2 impacted the left front side area of the Mercury Grand Marquis in an L-configuration crash sequence. Resultant directions of force were within the 1 o'clock sector for the Chevrolet Nova and 10 o'clock for the struck Grand Marquis. As the vehicles crushed to maximum engagement, the Nova underwent a total velocity change of 29 KPH (18 mph) while the Grand Marquis underwent a speed change of 24 KPH (15 mph). The longitudinal component of the Marquis's speed change was -21 KPH (-13 mph) which was sufficient to deploy the vehicle's SRS.

The Grand Marquis was impacted forward of its center of gravity (CG) and as a result, the vehicle was rotated in a clockwise direction. The Chevrolet Nova was deflected in a counterclockwise direction as its CG continued in a northerly direction. The vehicles subsequently impacted in a minor sideslap configuration which involved the right side of the Nova against the left side of the Grand Marquis. Resultant directions of force for the sideslap were 3 o'clock for the Nova and 9 o'clock for the Grand Marquis.

The vehicles separated following the sideslap sequence and continued on parallel paths to final rest. The Grand Marquis traveled approximately 14.6m

COLLISION SEQUENCE (CONT'D.)

(48') from the initial point of impact (POI) to final rest. The Chevrolet Nova traveled approximately 17.7m (58') from its initial impact position to final rest.

Post-Crash:

Final Rest -

The Mercury Grand Marquis came to rest straddling the center lane lines of the southbound travel lanes at the northwest quadrant of the intersection. At rest, the vehicle was facing in a northerly direction and was slightly diagonal to the southbound lanes. The Chevrolet Nova came to rest adjacent to the left side of the Grand Marquis. At rest, the Nova was facing in a northerly direction and was blocking the outboard southbound travel lane.

Driver/ Occupant Activities -

The driver of the Mercury Grand Marquis remained conscious and fully alert during the crash sequence. As her vehicle came to rest, she detected a gaseous odor within the vehicle and noted a smoke-like substance which contained dark particles. She immediately associated the odor and smoke with the air bag as she observed the deflated bag protruding from the steering column.

The driver's 4-year-old grandson was seated in the center front position of the vehicle. He unfastened the manual lap belt and crawled over the front seatback in an attempt to exit the vehicle. His 6-year-old sister remained seated in the right front position.

A neighbor to the crash scene opened the right front door and assisted the child occupants from the vehicle. The driver of the Grand Marquis unfastened her 3-point manual belt system with her left hand and slid to the center position of the front seat where she waited for rescue personnel to arrive on-scene.

Post - Crash
(Cont'd.)

Driver/Occupant
Activities -

The driver of vehicle #2 exited his vehicle and walked over to the Grand Marquis to check on the condition of its occupants. The driver of the Grand Marquis stated that as driver #2 observed her arm injury, he commented that "the air bag did that."

Police
Activities -

The city police department was notified of the crash and dispatched an officer to the scene. The investigating officer arrived on-scene approximately 4 minutes following the crash.

Rescue
Activities -

Two ambulances were dispatched to the crash scene. The EMTs treated the driver's arm injury as she remained in the vehicle. She subsequently slid across the vehicle and exited from the right front door and walked to the stretcher. She was subsequently transported by ambulance to a local hospital where she was admitted for treatment of her injuries.

Driver #2 received first aid at the crash scene and was transported by ambulance to a local hospital where he was treated for a forehead laceration and released.

The daughter of the Mercury's driver was called to the scene of the crash. She transported her children, who were not injured, to the family business and traveled to the hospital to check on the condition of the driver.

Scene
Clearance -

Following the police investigation, both vehicles were towed from the crash scene and normal traffic flow was restored.

HUMAN FACTORS/OCCUPANT DATA

Air Bag Vehicle

Driver:	73 year old female
Height:	149.9cm (59")
Weight:	56.3kg (125 lbs.)
Occupation:	Retired
Manual Restraint System Usage:	3-point lap and shoulder belt system
Usage Source:	Driver interview, vehicle inspection
Eyewear:	Plastic framed prescription eyeglasses, remained on driver's face and were not damaged
Vehicle Familiarity:	20 months
Route Familiarity:	Daily
Trip Plan:	Returning to residence
Manner of Leaving Scene:	Ambulance
Type of Medical Treatment:	Admitted to a local hospital for 13 days for treatment of her injuries

DRIVER INJURIES

<u>Injury</u>	<u>Severity (OIC/AIS)</u>	<u>Source</u>
Multiple segmental open fractures of the right radius and ulna, with fractures of both the distal and proximal ulna	Serious (RRFS-3)	Upper air bag module cover flap/air bag
Circumferential degloving laceration involving the skin and subcutaneous tissue down to the muscle layer involving approximately 340° of the right forearm	Moderate (RRVI-2)	Upper air bag module cover flap/air bag (open fractures contributed to size of laceration)
Fracture of the right olecranon	Moderate (ERFS-2)	Upper air bag module cover flap/air bag
Fracture of the proximal phalanx of the right 5th digit	Minor (WRFS-1)	Air bag
Contusion of the lateral aspect of the left knee	Minor (KLCI-1)	Left front door panel

DRIVER KINEMATICS

The driver of the Mercury Grand Marquis was in a normal driving position at impact. The vehicle was equipped with 6-way power front seats that were split in a 50/50 configuration with dual center armrests. The driver had the power seat adjusted to a forward track position 10.2cm (4") from full forward position, and the seatback set to its most forward position. The seat was also adjusted to its most vertical position. The driver stated that she normally drove the vehicle with the tilt column adjusted to a lower position. At the time of our inspection, the column was found adjusted to its center position. She was wearing the manual 3-point lap and shoulder belt system. Belt usage was verified by blood stains on the belt webbing in the area of the latchplate/buckle assembly. If the belt system had not been worn, this area of the webbing would have been retracted against the B-pillar and away from the driver's arm injury. The driver was wearing a short sleeve blouse at the time of the crash.

The driver stated that she normally drove the Grand Marquis with both hands on the steering wheel rim at the 9 and 3 o'clock positions. As she accelerated from the stop sign and initiated the left turn, her right hand turned the wheel in a counterclockwise direction. At impact, her right hand was probably at the 11 o'clock position on the wheel with her forearm extending across the air bag module cover. As the SRS deployed, the upper module flap cover struck the anterior and lateral aspect of the driver's mid right forearm. The flap probably lacerated the forearm and fractured the radius and ulna. The deploying air bag subsequently struck the forearm which contributed to the severity of the injuries. There was no evidence of contact on the module flap cover; however, tissue fragments were visible on the lower right quadrant of the air bag. The module flap/air bag contact produced multiple segmental open fractures of the right radius and ulna with fractures of both the distal and proximal ulna (AIS-3) and a circumferential degloving laceration involving the skin and subcutaneous tissue down to the muscle layer which involved 340° of the right forearm (AIS-2). In addition to the forearm fractures, the driver also sustained a fracture of the right olecranon (AIS-2) from contact with the module cover flap/air bag, and a fracture of the proximal phalanx of the right 5th digit (AIS-1) from probable air bag contact.

The expanding air bag displaced the driver's right forearm up and over her head in a circular motion. Tissue and blood spatters were visible on the headliner, left roof side rail and B-pillar areas and across the full width of the rear seatback.

The driver's left lateral knee area contacted the intruding left door panel area which resulted in a large contusion (AIS-1). There was no evidence of contact to the door panel area. Her face and torso areas probably contacted the fully deployed air bag. The

driver was wearing plastic framed eyeglasses which remained on her face. She was also wearing a wristwatch on her left wrist and a small butterfly pin over her left chest. Both jewelry items remained in place and were not damaged. The driver did not sustain additional injury from her subsequent involvement with the air bag.

ADDITIONAL OCCUPANT DATA

Center Front Passenger:	4 year old male
Height:	106.7cm (42")
Weight:	17.1kg (38 lbs)
Manual Restraint System Usage:	2-point lap belt
Usage Source:	Driver interview data
Type of Medical Treatment:	None, not injured

PASSENGER INJURIES

<u>Injury</u>	<u>Severity (OIC/AIS)</u>	<u>Source</u>
Not injured	N/A	N/A

PASSENGER KINEMATICS

The center front passenger was seated on the right half of the 50/50 split bench seat. He was wearing the manual lap belt. Belt usage was supported by driver statements and blood stains on the latchplate and buckle assembly of the system. The child passenger probably initiated a slight lateral trajectory to his left and loaded the right side of the driver. The lap belt restrained him in his seated position and as a result, he was not injured.

Right Front Passenger:	6 year old female
Height:	111.8cm (44")
Weight:	22.5kg (50 lbs.)
Manual Restraint System Usage:	3-point lap and shoulder belt
Usage Source:	Driver interview
Type of Medical Treatment:	None, not injured

PASSENGER INJURIES

<u>Injury</u>	<u>Severity (OIC/AIS)</u>	<u>Source</u>
Not injured	N/A	N/A

PASSENGER KINEMATICS

The right front passenger was fully restrained by the active 3-point lap and shoulder belt system. Restraint usage was determined from driver statements as no loading evidence was visible on the system. She probably loaded the 3-point belt system during the crash which prevented her from injury.

SELECTED PRINTS



Pre-Crash Trajectory Of the 1991 Mercury Grand Marquis.



Stopped Position Of The Grand Marquis At the
Mouth Of The Intersection.



Driver's View Of The Approach Of Vehicle #2
(No Parked Vehicles At Time Of Scene Inspection).



Grand Marquis' Trajectory To Impact.



Post-Crash Trajectory And Final Rest Area.



Lookback View Of The Grand Marquis' Trajectory.



Pre-Crash Trajectory Of Vehicle #2.



Vehicle #2's Approach To The Crash Site.



Area Of Impact.



Post-Crash Trajectory And Final Rest Position of Vehicle #2.



Lookback View Of Vehicle #2's Trajectory.



Left Front Three-Quarter Views Of The Mercury Grand Marquis.



Direct Contact Damage That Resulted From The Initial Impact
Sequence With Vehicle #2.



Extent Of Crush From The Primary Impact Sequence.



Frontal Views Showing The Extent Of Crush.



Fractured Left Upper Ball-Joint.



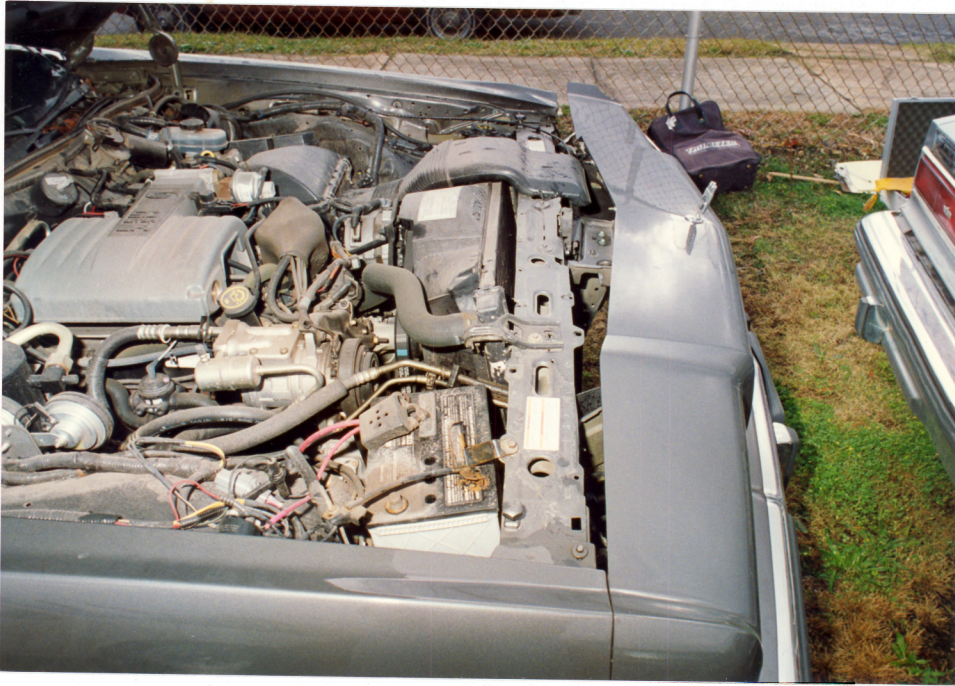
Secondary Sideslap Damage To The Left Side Of The Grand Marquis.



Sideslap Damage On The Quarter Panel And Taillight Lens.



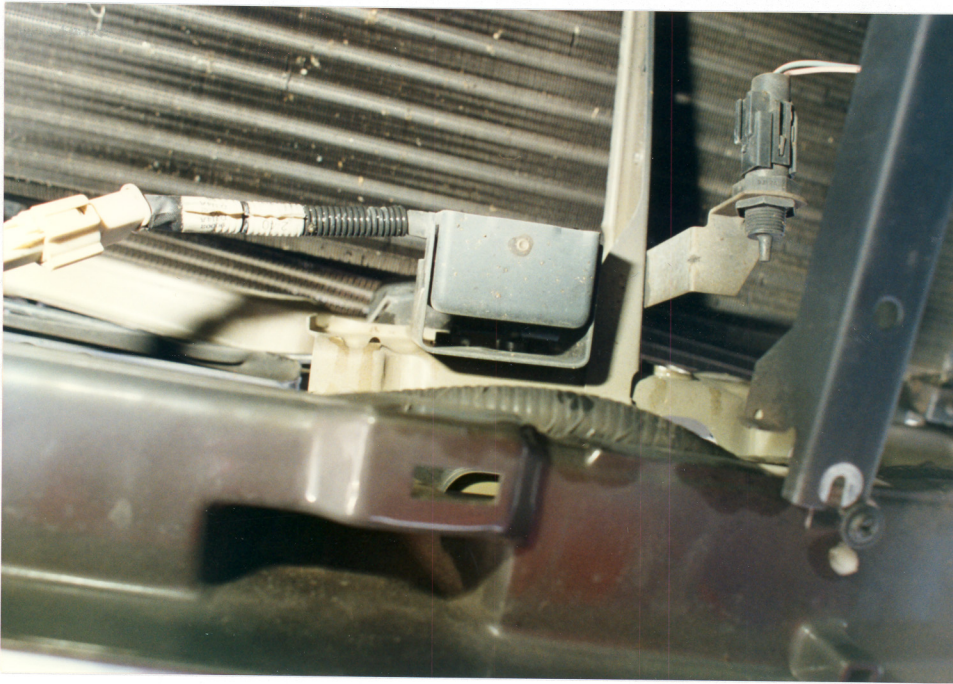
Undamaged Right Side Area.



View Of The Engine Compartment.



Right Front Air Bag Crash Sensor.



Center Front Air Bag Crash Sensor.



Left Front Air Bag Crash Sensor Displaced By Damage.



Vehicle Identification Tag On Left Front Door.



Overall View Of The Deployed Air Bag.



Driver's Seat And Manual 3-Point Belt System.



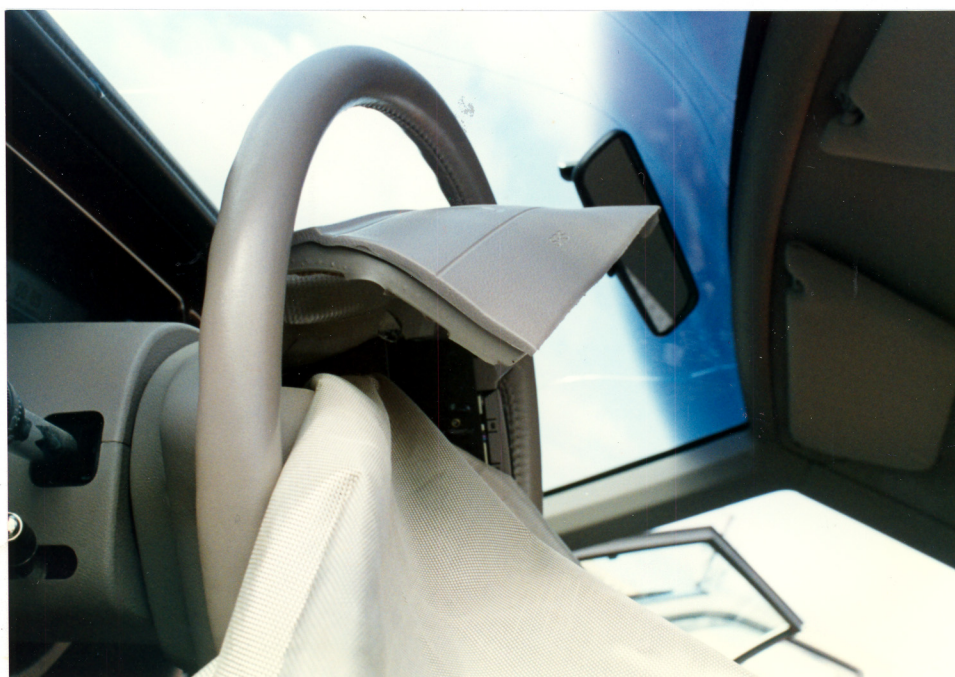
Deployed Air Bag And Module Cover Flaps.



Upper Air Bag Module Cover Flap.



Inside View Of The Upper Module Flap.



Perpendicular Views Of The Upper Air Bag Module Cover Flap.



Venting Port At The 8 O'Clock Position.



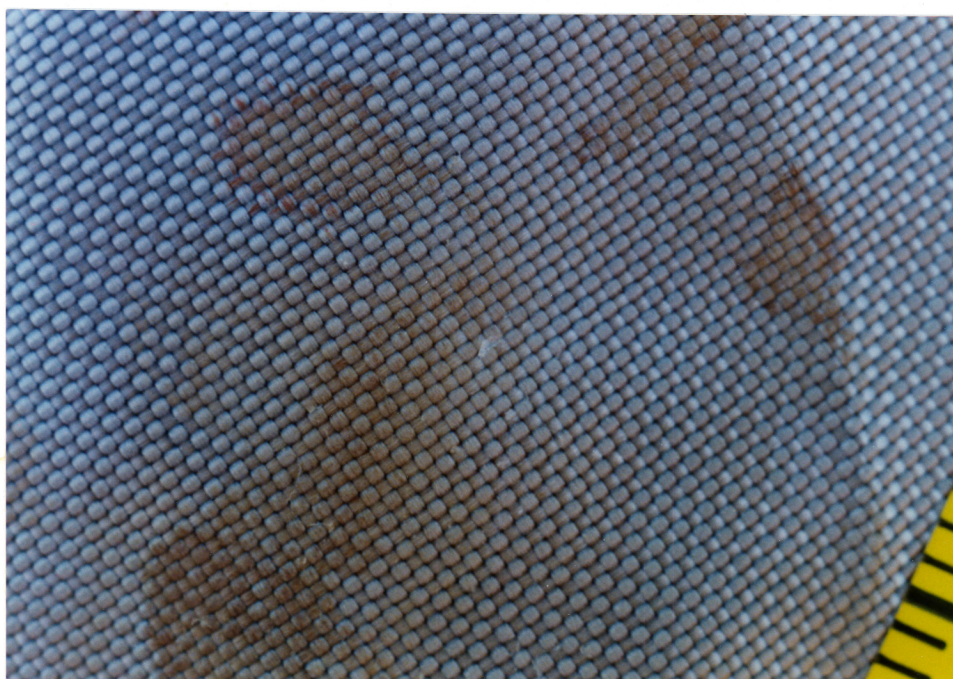
Venting Port At The 2 O'Clock Position.



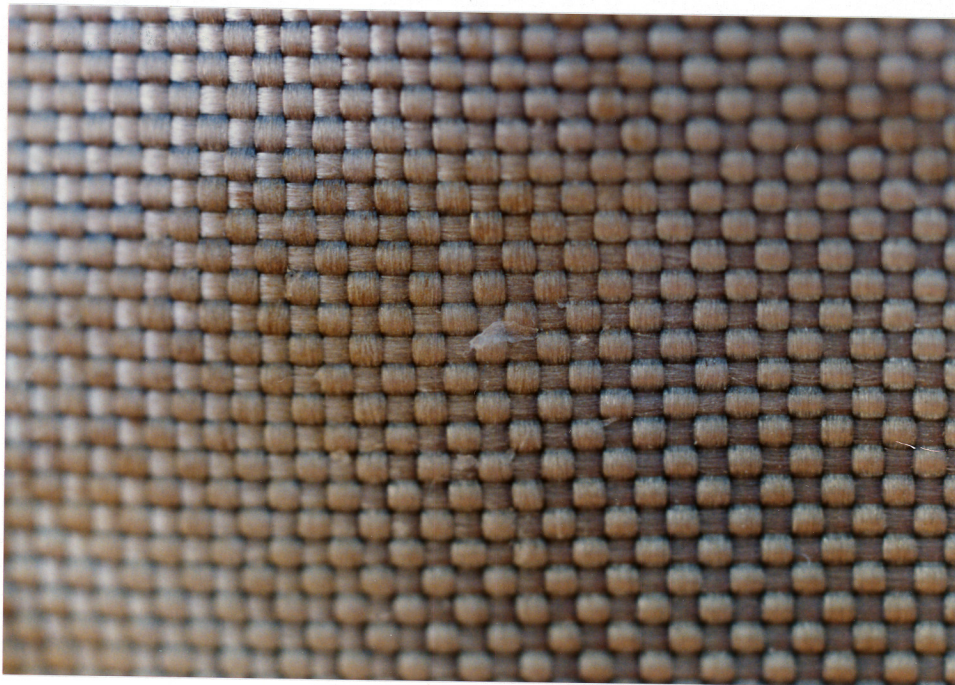
Close-Up View Of The Driver's Air Bag.



Blood And Tissue Deposits At The
Lower Right Quadrant Of The Air Bag.



Tissue Transfer On Air Bag.



Close-up View Of The Tissue.



Water And Blood Stain At the Lower Left Quadrant Of The Air Bag.



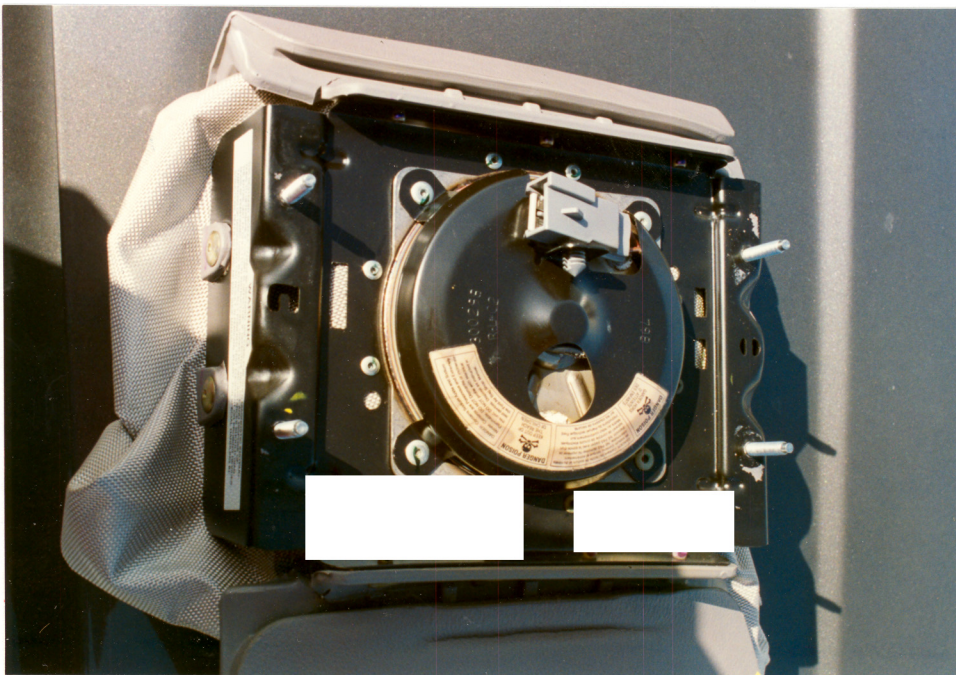
Blood On The Driver's Belt Webbing At The Latchplate Area.



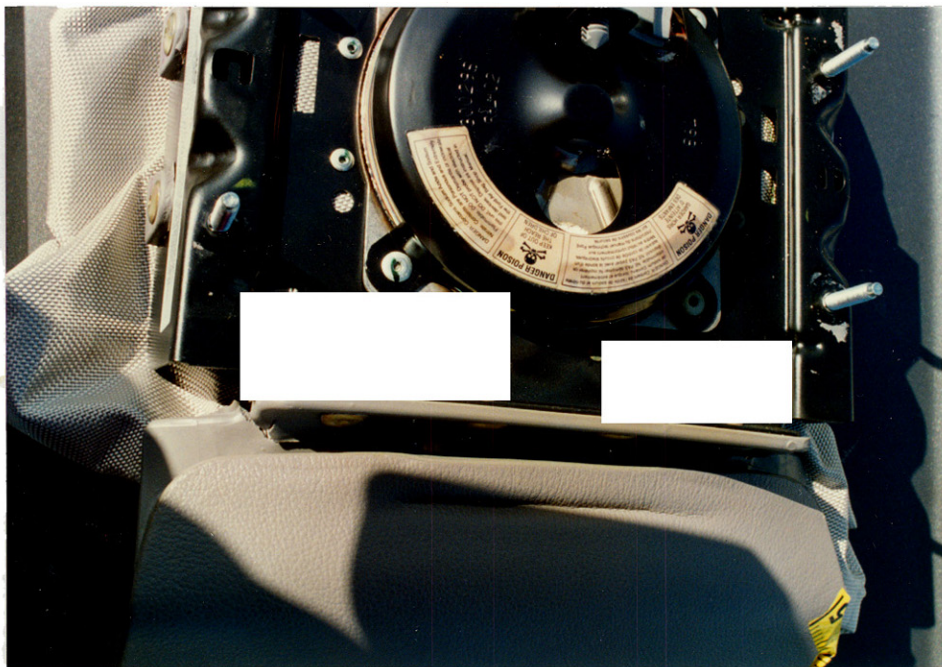
Body Fluid And Tissue Spatter On Left Headliner,
Siderail, And B-Pillar.



Tissue Spatter Across Rear Seat Back.



Back Side Of The Air Bag Module Assembly.



Air Bag Module Identification Numbers.



Left Side View Of The Air Bag Module Cover Flaps.



Right Side View Of The Air Bag Module Cover Flaps.



Close-up View Of The Upper Flap.



Frontal View Of Vehicle #2.



Left Frontal View.



Perpendicular Views Showing The Extent Of Crush.



Right Front Three-Quarter View.



Sideslap Damage To The Right Side Of Vehicle #2.



Driver Head Contact To Windshield.



Driver Loading Damage To Steering Wheel Rim.

SLIDE INDEX

1	Accident schematic
2	Driver injury mannequin
3,4	Pre-crash trajectory of the Mercury Grand Marquis
5	POI and FRP of the Grand Marquis
6,7	Pre-crash trajectory of vehicle #2
8	Lookback view of vehicle #2's path of travel
9	Left front three-quarter view of the Grand Marquis
10	Longitudinal view showing the extent of crush
11,12	Close-up views of the primary impact damage
13,14	Additional views of the impact damage
15	Sideslap damage to the left side area
16	Right front three-quarter view
17	Perpendicular view across the radiator support panel
18,19	Overall views of the driver's seated area
20	3-point manual belt system
21	Overall view of the deployed air bag
22	Upper air bag module cover flap
23,24	Perpendicular views of the module flap
25,26	Lower air bag module cover flap
27	Blood stains on the deployed air bag
28	Venting port at the 2 o'clock position
29	Identification numbers on the back side of the module assembly

SLIDE INDEX (CONT'D).

30-32	Tissue/blood spatter on the headliner, B-pillar and side rail
33,34	Tissue spatter on the rear seat back
35,36	Views across the interior from the right door area
37	Driver's adjusted seated position
38	Blood on driver's belt webbing
39-40	Frontal views of vehicle #2

Accident Rehearsal
 Calapan Case No. 90-11



- Notes:
 #1 - 1991 Mercury Grand
 Marquis, 4 Dr. Sedan
 #2 - 1991 Chevrolet Beretta,
 2 Dr. Sedan



AGE 35
 SEX Male
 WGT 175 lbs.
 HT. 5'7"

Front view of the right
 forearm (A10-11,
 upper air bag module
 cover flap/skin bag

Multiple segmented open
 structures of the right
 elbow and wrist, with
 structures of both the
 dorsal and ventral
 wrist (part-1), upper
 air bag module cover
 flap/skin bag

Transverse cut
 displaying internal
 structure of the wrist
 and elbow/wrist
 (part-2) to the
 middle finger
 (part-3) upper
 air bag module
 cover flap/skin bag

Front view of the proximal
 phalanx of the right
 first finger (A10-11,
 air bag

Structure of the lateral
 aspect of the left knee
 (A10-11), left knee joint





CA 9222 #3
Best Available



CA 9222 #4
Best Available



CA9222 #5
Best Available



CA9222 #6
Best Available



CA 9222 #7
Best Available



CA9222 #8
Best Available



CA9222 #9
Best Available



CA9222 #10



CA9222 #11



CA9222 #12
Best Available



CA9222 #13



CA9222 #14



CA9222 #15



CA9222 #16



CA9222 #17



CA9222 #18



CA9222 #19
Best Available



CA 9222 #20
Best Available



CA9222 #21



CA9222 #22



CA9222 #23



CA9222 #24
Best Available



CA9222 #25



CA9222 #26



CA9222 #27



CA9222 #28



CA 9222 #29



CA 9222 #30
Best Available



CA9222 #31
Best Available



CA9222 #32
Best Available



CA9222 #33
Best Available



CA9222 #34
Best Available



CA9222 #35
Best Available



CA 9222 #38
Best Available



CA9222 #37



CA9222 #38



CA9222 #39



CA9222 #40

APPENDIX A

Police Accident Report

ALABAMA UNIFORM TRAFFIC ACCIDENT REPORT

DPS

Report No.

Red Areas To Be Used By Data Processing Only

Sheet 1 of 1 Sheet(s)

Microfilm No.

Case No.

Date	1992	Time	12:14	AM PM	M	Day of Week	W	County	CL	City	Rural	Highway Classification	1 - State 2 - Federal	3 - State 4 - County	5 - Private Prop 6 - Other	Local Zone										
On Street, Road or Highway	ST										At Intersection of or Between (Node 1)		And (Node 2)		N/A											
Street or Road Code	1000-219										Node 1 or 2 (Circle One)															
Intersection Related	Node 1 2 Node 2										Control Access Hwy Loc		1 - Main Rd 3 - Interchange 5 - Exit Ramp		Prime Contr. Ercing		Prime Contr. Unit No									
First Harmful Event	20										Distance to Fixed Object		N/A		No of Vehicles		No Pedestrians		No Injured		No Fatalities		Unit 1 Type		Unit 2 Type	

Driver Full Name	[Redacted]										City and State		ZIP		Telephone No																			
DOB	1962	Month	12	Day	14	Year	1962	Race	W	Sex	F	DL State	AL	Driver License No.	[Redacted]	DL Class	1	DL Status	C	List Restrictions	Not Complied With	CDL Status	N	List Endorsements	Not Complied With	Residence Less Than 25 Miles	Yes	No						
Place of Employment	None										Liability Insurance Co		[Redacted]		Social Security No		[Redacted]																	
Driver/Ped Condition	2 - Apparently Asleep										Sobriety		Officer's Opinion		Alcohol Drugs		Yes		Unk		Type Test		1 - Blood Test 3 - Urine Test		2 - Breath Test 4 - Unable to Administer		5 - Refused Test		Test Results		CER			
Maneuver	01										Travel Road Name		ST		Road Code		Travel Direction		N E S W A Not on Rd U Unk		Other Contrib Circumstance		79		Prime Harm Event		20		Event Loc		6			
Veh Year	91	Make	MERC	Model	GRAN	Body	4	VIN	2MECM75FIMX										License Jan Number		[Redacted]		State		AL		Year		93					
Owner's Name	SAR E										Street or RFD		City		State		ZIP																	
Type	1 - Auto										Usage		Personal		Hazardous Cargo		None		Attachment		None		Contributing Defect		1 - Brakes 9 - Windows/W Shield		Circle areas Damaged On Diagram		10 - Under Carriage		[Diagram]			
Speed Limit	30 MPH										Est Speed		10 MPH		Citation/Offense Charged		None		Damage Severity		1 - None Visible 2 - Not Disabled		Vehicle Towed Away?		No		Occupants in Unit		3		Total Injuries in Unit		0	

Driver/Pedestrian Full Name	[Redacted]										City and State		ZIP		Telephone No																			
DOB	1962	Month	12	Day	14	Year	1962	Race	W	Sex	M	DL State	AL	Driver License No.	[Redacted]	DL Class	1	DL Status	5	List Restrictions	Not Complied With	CDL Status	1	List Endorsements	Not Complied With	Residence Less Than 25 Miles	Yes	No						
Place of Employment	None										Liability Insurance Co		None		Social Security No		[Redacted]																	
Driver/Ped Condition	2 - Apparently Asleep										Sobriety		Officer's Opinion		Alcohol Drugs		Yes		Unk		Type Test		1 - Blood Test 3 - Urine Test		2 - Breath Test 4 - Unable to Administer		5 - Refused Test		Test Results		CER			
Maneuver	01										Travel Road Name		ST		Road Code		Travel Direction		S W A Not on Rd U Unk		Other Contrib Circumstance		79		Prime Harm Event		20		Event Loc		6			
Veh Year	91	Make	CHEV	Model	NOVA	Body	2	VIN	1K2787W										License Jan Number		[Redacted]		State		AL		Year		92					
Owner's Name	SAR E										Street or RFD		City		State		ZIP																	
Type	1 - Auto										Usage		Personal		Hazardous Cargo		None		Attachment		None		Contributing Defect		1 - Brakes 9 - Windows/W Shield		Circle areas Damaged On Diagram		10 - Under Carriage		[Diagram]			
Speed Limit	30 MPH										Est Speed		30 MPH		Citation/Offense Charged		D U S		Damage Severity		1 - None Visible 2 - Not Disabled		Vehicle Towed Away?		No		Occupants in Unit		1		Total Injuries in Unit		0	

Contributing Circumstances	01 Improper Passing 13 Improper Driving Position 25 Veh Pushed by Person 02 Improper Lane Change/Usage 14 Road Block 26 Veh Left Road 03 Improper Turn 15 Vision Obstructed 27 Driver Not in Control 04 Following Too Close 16 Defective Equipment 28 Load Shift 05 Miscalculation/Distance 17 (Blank) 29 Parts/Cargo from Veh 06 Over Speed Limit 18 Under Min Speed 30 Ped Violation 07 Avoid Obstruct Person Veh 19 Improper Lane Change 31 Veh Went Into Traffic 08 Unseen Obstruct Person Veh 20 Improper Attn 32 First Under Influence 09 Improper Backing 21 Red in Traffic 33 Illegal Impound Parking 10 Improper Right of Way 22 Wrong Side of Road 34 Other 11 Improper Right of Way 23 Wrong Side of Road 35 Unknown 12 Red in Traffic 24 Veh Entered From Front 36 Unknown										01 Go Straight Ahead 02 Pass on Left 03 Pass on 1 Way Street 04 Pass on Right 05 Go Straight Left Turn Lane 06 Go Straight Right Turn Lane 07 Change Lanes Left 08 Change Lanes Right 09 Merge Left 10 Merge Right 11 Wrong Side of Road 12 Wrong Way 13 Right Turn 14 Left Turn 15 U Turn 16 Start from Park 17 Start in Traffic 18 Moving Stopping 19 Stopping in Traffic 20 Stopping in Road 21 Entering Roadway from Property 22 Pedestrian into Road 23 Pedestrian into Traffic 24 Pedestrian into Road 25 Pedestrian into Traffic 26 Pedestrian into Road 27 Pedestrian into Traffic 28 Pedestrian into Road 29 Pedestrian into Traffic 30 Pedestrian into Road 31 Pedestrian into Traffic 32 Pedestrian into Road 33 Pedestrian into Traffic 34 Pedestrian into Road 35 Pedestrian into Traffic 36 Pedestrian into Road 37 Pedestrian into Traffic 38 Pedestrian into Road 39 Pedestrian into Traffic 40 Pedestrian into Road 41 Pedestrian into Traffic 42 Pedestrian into Road 43 Pedestrian into Traffic 44 Pedestrian into Road 45 Pedestrian into Traffic 46 Pedestrian into Road 47 Pedestrian into Traffic 48 Pedestrian into Road 49 Pedestrian into Traffic 50 Pedestrian into Road 51 Pedestrian into Traffic 52 Pedestrian into Road 53 Pedestrian into Traffic 54 Pedestrian into Road 55 Pedestrian into Traffic 56 Pedestrian into Road 57 Pedestrian into Traffic 58 Pedestrian into Road 59 Pedestrian into Traffic 60 Pedestrian into Road 61 Pedestrian into Traffic 62 Pedestrian into Road 63 Pedestrian into Traffic 64 Pedestrian into Road 65 Pedestrian into Traffic 66 Pedestrian into Road 67 Pedestrian into Traffic 68 Pedestrian into Road 69 Pedestrian into Traffic 70 Pedestrian into Road 71 Pedestrian into Traffic 72 Pedestrian into Road 73 Pedestrian into Traffic 74 Pedestrian into Road 75 Pedestrian into Traffic 76 Pedestrian into Road 77 Pedestrian into Traffic 78 Pedestrian into Road 79 Pedestrian into Traffic 80 Pedestrian into Road 81 Pedestrian into Traffic 82 Pedestrian into Road 83 Pedestrian into Traffic 84 Pedestrian into Road 85 Pedestrian into Traffic 86 Pedestrian into Road 87 Pedestrian into Traffic 88 Pedestrian into Road 89 Pedestrian into Traffic 90 Pedestrian into Road 91 Pedestrian into Traffic 92 Pedestrian into Road 93 Pedestrian into Traffic 94 Pedestrian into Road 95 Pedestrian into Traffic 96 Pedestrian into Road 97 Pedestrian into Traffic 98 Pedestrian into Road 99 Pedestrian into Traffic 100 Pedestrian into Road									
----------------------------	--	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--	--

SEATING

VICTIMS

N/A

CODES

NARRATIVE AND DIAGRAM

ROADWAY ENVIRONMENT

INVESTIGATION

Unit 1	24	24	24	24
7	8	9	10	11

(Circle One)

12 Pedestrian
13 Rider of Domestic Animal
14 Occ of Non Motorized Vehicle
15 Victim of Other Circumstance/
Codes Not Applicable

Other Involved
Safety Equipment

Unit 2	22	22	22	22
7	8	9	10	11

(Circle One)

12 Pedestrian
13 Rider of Domestic Animal
14 Occ of Non Motorized Vehicle
15 Victim of Other Circumstance/
Codes Not Applicable

Other Involved
Safety Equipment

SAFETY EQUIPMENT

01 None Installed
05 Not Applicable
09 Unknown (Any Type)
10 Lap Belt Only
11 Fastened
12 Not Fastened
13 Lap/Shoulder Harness
21 Lap Only Used
22 Neither Used
23 Shoulder Only Used
24 Both Used
Motorcycle Helmet
31 None Used
32 Used
Air Bags
41 Deployed Belts Used
42 Not Deployed Belts Used
43 Deployed Belts Not Used
44 Not Deployed Belts Not Used
Child Restraints
01 Child Restraint Used
02 Other Restraint Used
03 None Used
Pedal Cycle/Pedestrian
91 Contrasting Clothing
92 Non Contrasting Clothing

Name	Address	Unit No	Seat Pos	Injury Type	Age	Sex	Ejection	First Aid By
[REDACTED]	[REDACTED]	1	1	A	73	F	N	M
[REDACTED]	[REDACTED]	2	1	A	29	M	N	M

K - Killed
B - Bruise/Abrasion/Smelling
A - Visible or Carried from Scene
C - Not Visible - Has Pain/Faint
N - Not
F - Fully
P - Partially
Ejected
T - Trapped
U - Unknown
A - Not Applicable
A - Ambulance Attended
D - Doctor
First Aid By
M - Paramedic
O - Other
P - Police
U - Unknown
N - None

NOT TO SCALE

Officer's Opinion of What Happened: UNIT #1 DID NOT SEE UNIT #2. UNIT #1 PROCEEDED INTO INTERSECTION AFTER STOPPING. UNIT #2 WAS UNABLE TO STOP BEFORE IMPACT WITH UNIT #1. POINT OF IMPACT WAS 3' SOUTH OF NORTH CURB OF ST AND 22' EAST OF WEST CURB OF AVE.

Diagram showing intersection of AVE and ST. Unit 1 is at the intersection. Unit 2 is approaching from the north. A north arrow is shown.

For Each Roadway Environment Field Circle One Entry for Each Involved Unit

Unit 1	Contributing Road Defects	Surface Construction	Condition	Accident In Or Related To Road Construction Zone?	Material In Roadway (Contributing)	Material Source	Character
1	1 - None 2 - Shoulders Low 3 - Shoulders High 4 - Holes Bumps, Etc 8 - Other	1 - Asphalt 2 - Concrete 3 - Brick 4 - Unpaved 8 - Other	1 - Dry 2 - Wet 3 - Icy 4 - Snowy/Slushy 5 - Muddy 8 - Other	Yes No	1 - None 2 - Ruts 3 - Trees/Limbs 4 - Dirt 5 - Gravel 6 - Oil/Petrol 8 - Other	1 - Not Applicable 2 - Natural Environment 3 - Dropped From Vehicle 4 - Already in Road But Fell From Vehicle 8 - Other 9 - Unknown	1 - Straight-Level 2 - Straight-Down Grade 3 - Straight-Up Grade 4 - Straight-Hillcrest 5 - Curve-Level 6 - Curve-Down Grade 7 - Curve-Up Grade 8 - Curve-Hillcrest

Vision Obscured by:

1 - Not Obscured 2 - Buildings 3 - Signboard 4 - Trees, Crops, Bushes 5 - Blowing Snow/Sand 6 - Hillcrest 7 - Curve in Road 8 - Fog 9 - Parked Vehicle 10 - Moving Vehicle(s)	10 - Blinded by Sunlight 11 - Fog/Smoke 12 - Dust 13 - Blinded by Headlights 14 - Embankment 15 - Rain on Windshield 16 - Snow on Windshield 98 - Other 99 - Unknown
--	--

Traffic Control

1 - Police Officer 2 - RR Crossing Gates 3 - RR Flashing Lights 4 - RR Cross Buck - Pave Mark 5 - Pedestrian Control 6 - Traffic Signal 7 - Flashing Beacon 8 - Stop Sign 9 - Yield Sign 10 - Lane Control Device	11 - Flagger 12 - No Passing Zone 97 - None 98 - Other
--	---

Traffic Control Functioning: No

DOT Railroad Crossing No

Opposing Lanes Separated By:

97 - None 1 - Paved Surface 2 - Unpaved Surface 3 - Broken Painted Line 4 - Solid Painted Line 5 - Concrete Barrier 6 - Metal Guard Rail 7 - Fence 98 - Other Barrier

Trafficway Lanes

1 - One Lane 2 - Two Lanes 3 - Three Lanes 4 - Four Lanes 5 - Five Lanes 6 - Six Lanes or More

One Way Street: Yes

Light: 1 Daylight, 2 Dawn, 3 Dusk, 4 Darkness-Road Not Lit, 5 Darkness-Road Lit

Weather: 1 Clear, 2 Cloudy, 3 Rain, 4 Snow, 5 Sleet/Hail, 6 Crosswind, 7 Fog, 8 Other

Locate: 1 Open Country, 2 Residential, 3 Shop or Business, 4 Mfg or Industrial, 5 School, 6 Playground, 8 Other

Non-Vehicular Property Damage: 1 None Visible, 2 Light, 3 Moderate, 4 Severe

Property Damage Description: [REDACTED]

Owner: [REDACTED]

Address: N/A

Time Police Notified: 1214 PM, Time Police Arrived: 1218 PM, Time EMS Arrived: 1218 PM

Name of Photographer: N/A

Witness Full Name: [REDACTED], Address: [REDACTED], Telephone: [REDACTED]

Witness Full Name: [REDACTED], Address: [REDACTED], Telephone: [REDACTED]

Name of Investigating Officer: [REDACTED], Officer ID: [REDACTED], Agency (IRI): [REDACTED], Agency Off: [REDACTED]

Name of Other Investigating Officer(s) at Scene: [REDACTED], Officer ID: [REDACTED], Agency (IRI): [REDACTED], Agency Off: [REDACTED]

The data on this report reflects my best knowledge, opinion and belief covering the facts and circumstances of the incident and the factual accuracy thereof.

Signature of Investigating Officer: [REDACTED], Date: 7-1-82

APPENDIX B

Air Bag Supplement

BEST AVAILABLE COPY

SYSTEM READINESS LAMP (In Instrument Cluster)		AIRBAG VEHICLE FIRST HARMFUL EVENT	13
<p>PRE-IMPACT LAMP CONDITION</p> <p>(1) Functioning/ProvedOut</p> <p>(2) Inoperative</p> <p>(9) Unknown</p>	1	<p>(01) Fire or explosion</p> <p>(02) Immersion</p> <p>(03) Gas Inhalation</p> <p>(04) Fell from vehicle</p> <p>(05) Injured in vehicle</p> <p>(06) Other noncollision (specify):</p> <p>(07) Overturn</p> <p>(08) Jackknife with intraunit damage</p>	
<p>DRIVER'S REPORT OF PRE-IMPACT FLASHING</p> <p>(00) No Flashing Reported</p> <p>(01) Continuous Flashing</p> <p>(02) -- >Number of Flashes</p> <p>(11)</p> <p>(12) Constant Light</p> <p>(19) Flashing, Unkn Number</p> <p>(88) Not App (system removed)</p> <p>(99) Unknown</p>	00	<p>Collision With:</p> <p>(09) Pedestrian</p> <p>(10) Pedalcyclist</p> <p>(11) Railway train</p> <p>(12) Animal</p> <p>(13) Motor vehicle in transport (same roadway)</p> <p>(14) Motor vehicle in transport (other roadway)</p> <p>(15) Parked motor vehicle</p> <p>(16) Other type nonmotorist (specify):</p> <p>(17) Thrown or falling object</p> <p>(18) Boulder</p>	
<p>PERIOD OF PRE-IMPACT FLASHING</p> <p>(0) No Flashing</p> <p>(1) Same Day as Impact</p> <p>(2) Prior Day</p> <p>(3) Prior Two Days</p> <p>(4) Prior Week</p> <p>(5) Prior Month</p> <p>(6) Over One Month</p> <p>(9) Unknown</p>	0	<p>Collision with Fixed Object:</p> <p>(20) Building</p> <p>(21) Impact attenuator/Crash Cushion</p> <p>(22) Bridge pier or abutment</p> <p>(23) Bridge parapet end</p> <p>(24) Bridge rail</p> <p>(25) Guardrail</p> <p>(26) Concrete traffic barrier</p> <p>(27) Median barrier</p> <p>(28) Other longitudinal barrier (specify):</p> <p>(29) Highway/Traffic sign post</p> <p>(30) Overhead sign support</p> <p>(31) Luminaire/Light support</p> <p>(32) Utility pole</p> <p>(33) Other post, pole, or support (specify):</p> <p>(34) Culvert</p> <p>(35) Curb</p> <p>(36) Ditch</p> <p>(37) Embankment-earth</p> <p>(38) Embankment-rock, stone or concrete</p> <p>(39) Fence (wooden, wire, chain link, etc.)</p> <p>(40) Wall (stone, rock, metal, etc.)</p> <p>(41) Fire hydrant</p> <p>(42) Shrubbery</p> <p>(43) Tree</p> <p>(44) Other fixed object (specify):</p> <p>(45) Pavement surface irregularity (pothole, grooved, grates)</p> <p>(99) Unknown</p>	
<p>POST-IMPACT LAMP CONDITION</p> <p>(1) Functioning/ProvedOut</p> <p>(2) Inoperative</p> <p>(9) Unknown</p>	1		
<p>POST-IMPACT FLASHING</p> <p>(00) No Flashing</p> <p>(01) Continuous Flashing</p> <p>(02) -- >Number of Flashes</p> <p>(11)</p> <p>(12) Constant Light</p> <p>(19) Flashing, Unkn Number</p> <p>(88) Not Appl (removed)</p> <p>(99) Unknown</p>	01		

AIRBAG VEHICLE IMPACT SUMMARY

VEHICLE ROLE

- (0) Non-collision
 (1) Striking Unit
 (2) Struck Unit
 (3) Both Striking and Struck
 (9) Unknown

MANNER OF LEAVING SCENE

- (1) Driven
 (2) Towed-due to damage
 (3) Towed - not for damage
 (4) Towed - details unknown
 (5) Abandoned
 (9) Unknown

NUMBER OF IMPACT EVENTS

- (8) 8 or more, (9) Unknown

ROLLOVER (0) No Rollover

- (1) First Event
 (2) Subsequent Event
 (3) Yes, Unknown Event
 (9) Unknown

OVERRIDE/UNDERRIDE

- (1) No over/underride
 (1) Override - 1st CDC
 (3) - Other CDC
 (4) Underride - 1st CDC
 (6) - Other CDC
 (9) Unknown

AIRBAG VEHICLE DAMAGE

- CODES: (1) Yes, DAMAGED
 (2) No Damage
 (9) Unknown

LEFT FRONT FENDER DAMAGE

RIGHT FRONT FENDER DAMAGE

CENTER TOP OF GRILLE DAMAGE

FRONT BUMPER E.A. STATUS: Left

- (1) Normal Right
 (2) Extended
 (3) Partial Compression
 (4) Complete Compression
 (5) Not Applicable
 (9) Unknown

FIRST AIRBAG VEHICLE IMPACT:

CONFIGURATION

- (0) Struck Object or Pedestrian
 (1) Rear-End
 (2) Head-On
 (3) Rear-to-Rear
 (4) Angle
 (5) Sideswipe - Same Direction
 (6) Sideswipe-Opposite Direct.
 (7) NonCollision Fell from Veh
 (8) NonImpact Deployment
 (9) Unknown

CDC 10 - L Y E W - 3OBJECT CONTACTED: 77 CHEVROLET NOVA

PRIMARY/DEPLOYMENT IMPACT:

EVENT NUMBER

TOTAL DELTA-V

15 mph

LONGITUDINAL DELTA-V

CONFIGURATION

- (0) Struck Object or Pedestrian
 (1) Rear-End
 (2) Head-On
 (3) Rear-to-Rear
 (4) Angle
 (5) Sideswipe - Same Direction
 (6) Sideswipe-Opposite Direct.
 (7) NonCollision Fell from Veh
 (8) NonImpact Deployment
 (9) Unknown

CDC 10 - L Y E W - 3OBJECT CONTACTED: 77 CHEVROLET NOVA

NOTES:

SYSTEM DAMAGE

AIRBAG SUPPLEMENT

AB-4

AIRBAG SYSTEM DAMAGE

CODES: (1) Yes, Damaged*
 (2) No, Intact
 (8) Not App. (Removed)
 (9) Unknown

AIRBAG MODULE (NORMAL DEPLOYMENT)

SENSORS: Left Front

*Left sensors
 notated due to
 damage, but
 not damaged.* Center Front

Right Front

Rear, Cowl

DIAGNOSTIC MODULE

WIRING

KNEE DIVERter

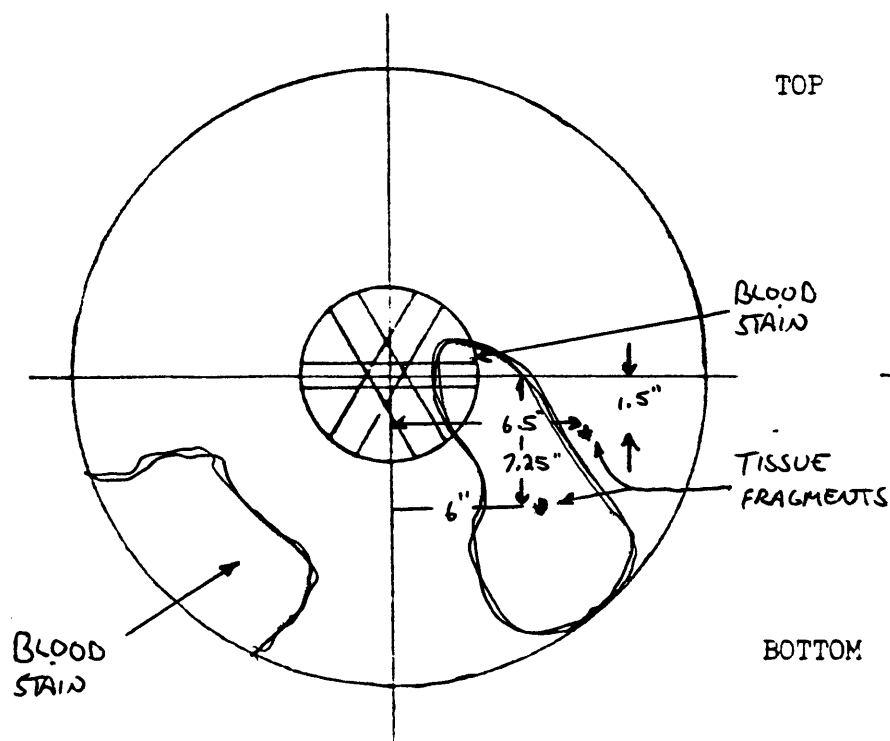
INDICATION OF DISCONNECTED
 OR LOOSE ELECTRICAL
 CONNECTORS

CONDITION OF DEPLOYED BAG

(1) Bag Intact
 (2) Split or Torn*
 (3) Cut by Object In Impact*
 (4) Cut after Accident*
 (5) Other (e.g., burned)*
 (8) N/A (not deployed)
 (9) Unknown

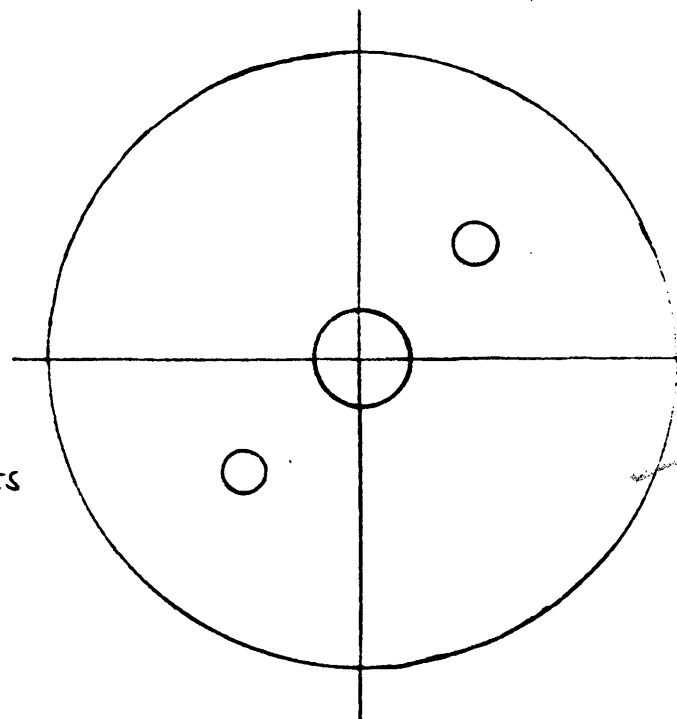
*DESCRIBE System and Bag Damage:

NOTE DAMAGE AND CONTACT MARKS ON AIRBAG DIAGRAMS BELOW:



TOP

BOTTOM



FRONT

63

BACK BEST AVAILABLE COPY

DRIVER BELT USAGE: (1) Used (2) Not Used (9) Unknown 1

Evidence: DRIVER STATEMENTS, BLOOD ON SHOULDER BELT WEBBING
AT LATCHPLATE

DRIVER POSTURE: Any Comments Recorded (1) Yes, (2) No 1

Describe driver's posture and position on seat including specific comments on head, torso, buttocks, legs and feet. Also note hand and arm position. Did driver brace before crash? Describe:

NORMAL UPRIGHT SEATED POSITION WITH BOTH HANDS ON STEERING WHEEL.
RIGHT FOREARM IN LEFT TURN MODE ACROSS AIR BAG MODULE

DRIVER FOREIGN OBJECTS: Comments Recorded (1) Yes, (2) No 1

Was driver wearing contact lenses or eyeglasses? Or holding any foreign object at the time of the impact (packages on lap, pipe, food, bottle, cigarette, etc.)? Did any lenses, objects, or jewelry play any role?:

① PLASTIC FRAMED EYEGLASSES, REMAINED ON FACE ② WATCH ON ④ WRIST,
REMAINED IN PLACE ③ BUTTERFLY PIN ON ④ CHEST, REMAINED IN PLACE

DRIVER COMMENTS: Comments Recorded (1) Yes, (2) No 1

Was the driver aware that the vehicle was equipped with a supplemental restraint system? Did driver offer any comments on smoke, noise, etc.? Did the driver comment on the airbag as a restraint system? Describe:

DRIVER AND PASSENGERS NOTED SMOKE IN VEHICLE, DARK
PARTICLES IN HAIR AND WOUND. DRIVER ALSO NOTED A "HORRIBLE
GASEOUS" ODOR IN VEHICLE.

PASSENGER-AIRBAG CONTACT (1) Yes, (2) No, (9) Unknown 2

Describe: NO CF OR RF PASSENGER CONTACT TO BAG.

APPENDIX C

CRASHPC Output
(Damage Algorithm)

SUMMARY OF CRASHFC RESULTS USING DAMAGE

CRASH3 RECONSTRUCTION

SPEED CHANGE
(DAMAGE)

VEHICLE #1

TOTAL 24 KPH (15 MPH)
 LONGITUDINAL -21 KPH (-13 MPH)
 LATITUDINAL 12 KPH (8 MPH)
 PDOF ANGLE -30 DEGREES
 ENERGY DISSIPATED = 50324 JOULES (37112 FT-LB)

VEHICLE #2

TOTAL 29 KPH (18 MPH)
 LONGITUDINAL -27 KPH (-17 MPH)
 LATITUDINAL -10 KPH (-6 MPH)
 PDOF ANGLE 20 DEGREES
 ENERGY DISSIPATED = 49927 JOULES (36819 FT-LB)

DIMENSIONS AND INERTIAL PROPERTIES

VEHICLE #1

CG TO FRONT AXLE 139 CM. (55 IN.)
 CG TO REAR AXLE 150 CM. (59 IN.)
 TRACK 157 CM. (62 IN.)
 CG TO FRONT OF VEH 251 CM. (99 IN.)
 CG TO REAR OF VEH -290 CM. (-114 IN.)
 CG TO SIDE OF VEH 98 CM. (39 IN.)
 MOMENT OF INERTIA 17845 KGS (39385 LBS)
 VEHICLE MASS 5 KGS (11 LBS)

VEHICLE #2

CG TO FRONT AXLE 139 CM. (55 IN.)
 CG TO REAR AXLE 150 CM. (59 IN.)
 TRACK 157 CM. (62 IN.)
 CG TO FRONT OF VEH 251 CM. (99 IN.)
 CG TO REAR OF VEH -290 CM. (-114 IN.)
 CG TO SIDE OF VEH 98 CM. (39 IN.)
 MOMENT OF INERTIA 15218 KGS (33548 LBS)
 VEHICLE MASS 4 KGS (9 LBS)

DAMAGE DATA

VEHICLE #1

SIZE CATEGORY 4
 STIFFNESS CATEGORY 4
 VEHICLE WEIGHT 1837 KGS (4049 LBS)
 CDC 10LYEN3
 PDOF ANGLE -30 DEGREES
 CRUSH LENGTH 134 CM. (53 IN.)
 C1 6 CM. (3 IN.)
 C2 21 CM. (8 IN.)
 C3 25 CM. (10 IN.)
 C4 27 CM. (11 IN.)
 C5 23 CM. (9 IN.)
 C6 3 CM. (1 IN.)
 D 115 CM. (57 IN.)
 D' 145 CM. (57 IN.)

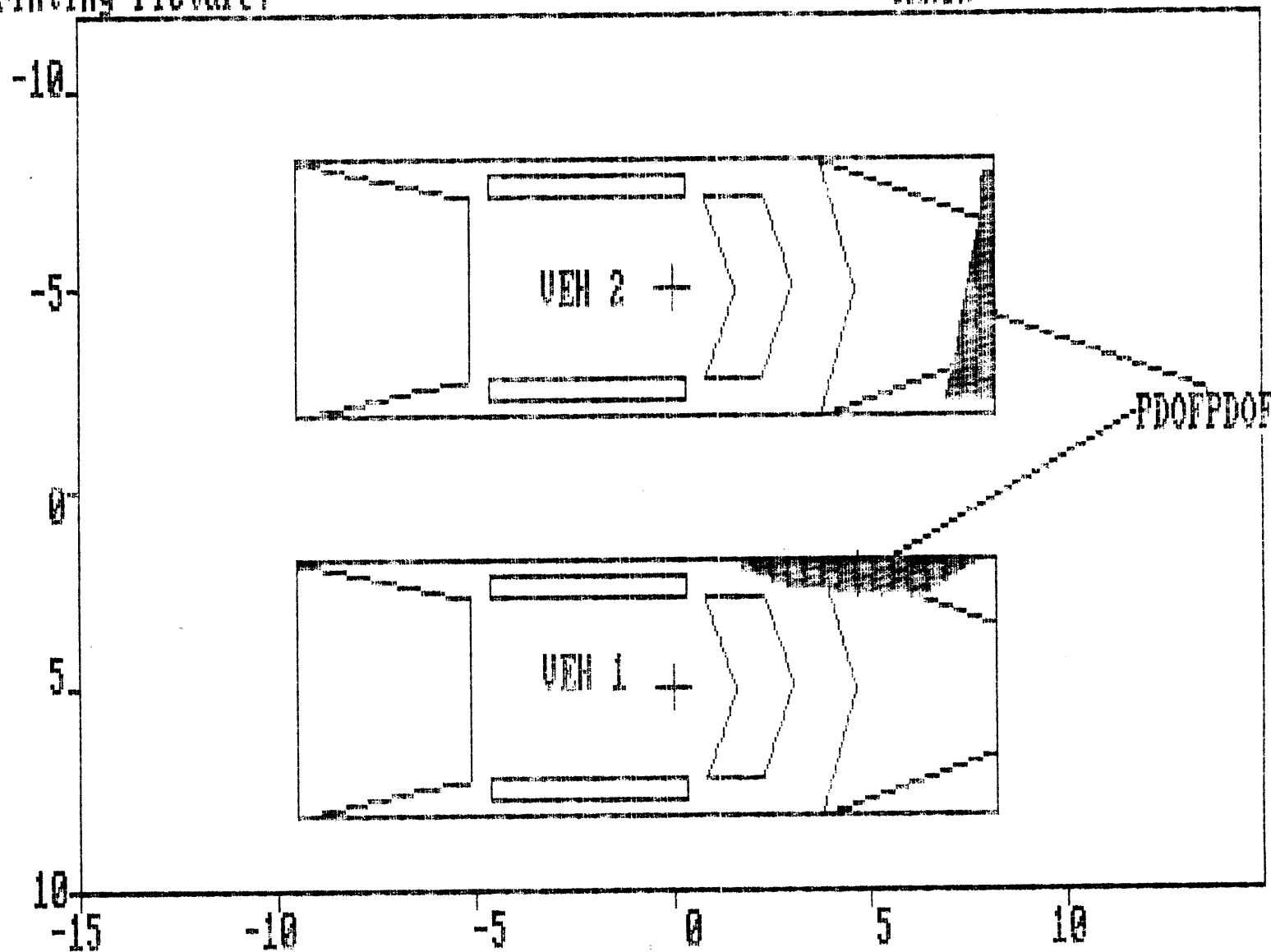
VEHICLE #2

SIZE CATEGORY 4
 STIFFNESS CATEGORY 4
 VEHICLE WEIGHT 1734 KGS (3847 LBS)
 CDC 01FDEW2
 PDOF ANGLE 20 DEGREES
 CRUSH LENGTH 170 CM. (67 IN.)
 C1 8 CM. (3 IN.)
 C2 9 CM. (4 IN.)
 C3 16 CM. (6 IN.)
 C4 23 CM. (9 IN.)
 C5 28 CM. (11 IN.)
 C6 37 CM. (15 IN.)
 D 0 CM. (0 IN.)
 D' 22 CM. (9 IN.)

(*) INDICATES DEFAULT VALUE

Printing Picture:

CRASH



DAMAGE DESCRIPTION

APPENDIX D

NASS Vehicle Forms
(Air Bag Vehicle)



GENERAL VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

VEHICLE IDENTIFICATION

4. Vehicle Model Year

Code the last two digits of the model year
(99) Unknown

5. Vehicle Make (specify):

MERCURY
Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown

6. Vehicle Model (specify):

GRAND MARQUIS LS
Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown

7. Body Type

Note: Applicable codes may be found on
the back of this page.

8. Vehicle Identification Number

2MECM25FLMX

Left justify; Slash zeros and letter Z (0 and Z)
No VIN—Code all zeros
Unknown—Code all nine's

OFFICIAL RECORDS

9. Police Reported Vehicle Disposition

(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

10. Police Reported Travel Speed

Code to the nearest mph (NOTE: 00 means
less than 0.5 mph)
(97) 96.5 mph and above
(99) Unknown

11. Police Reported Alcohol Presence

(0) No alcohol present
(1) Yes (alcohol present)
(7) Not reported
(8) No driver present
(9) Unknown

Note: See variables 37 through 55
(Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver

Code actual value (decimal implied
before first digit—0.xx)
(95) Test refused
(96) None given
(97) AC test performed, results unknown
(98) No driver present
(99) Unknown

Source: _____

ACCIDENT RELATED

13. Speed Limit

(00) No statutory limit
Code posted or statutory speed limit
(99) Unknown

14. Attempted Avoidance Maneuver

(00) No impact
(01) No avoidance actions
(02) Braking (no lockup)
(03) Braking (lockup)
(04) Braking (lockup unknown)
(05) Releasing brakes
(06) Steering left
(07) Steering right
(08) Braking and steering left
(09) Braking and steering right
(10) Accelerating
(11) Accelerating and steering left
(12) Accelerating and steering right
(97) No driver present
(98) Other action (specify):
(99) Unknown

15. Accident Type

Applicable codes may be found on the
back of page two of this field form
(00) No impact
Code the number of the diagram that
best describes the accident circumstance
(98) Other accident type (specify):
(99) Unknown

**** SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 ****

CODES FOR BODY TYPE

CDS APPLICABLE VEHICLES

Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): _____
- (09) Unknown automobile type

Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

Utility Vehicles ($\leq 10,000$ lbs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravado, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

Van Based Light Trucks ($\leq 10,000$ lbs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Mitsubishi Minivan, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ($\leq 10,000$ lbs GVWR)
- (23) Van based motorhome ($\leq 10,000$ lbs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): _____
- (29) Unknown van type

Light Conventional Trucks (Pickup style cab, $\leq 10,000$ lbs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500.)
- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

Other Light Trucks ($\leq 10,000$ lbs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): _____
- (59) Unknown bus type

Medium/Heavy Trucks ($> 10,000$ lbs GVWR)

- (60) Step van ($> 10,000$ lbs GVWR)
- (61) Single unit straight truck ($10,000$ lbs $<$ GVWR $\leq 19,500$ lbs)
- (62) Single unit straight truck ($19,500$ lbs $<$ GVWR $\leq 26,000$ lbs)
- (63) Single unit straight truck ($> 26,000$ lbs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (mini bike, motorscooter) (specify): _____
- (89) Unknown motored cycle type

Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

OCCUPANT RELATED

16. Driver Presence in Vehicle 1
 (0) Driver not present
 (1) Driver present
 (9) Unknown
17. Number of Occupants This Vehicle 03
 (00-96) Code actual number of occupants for this vehicle
 (97) 97 or more
 (99) Unknown
18. Number of Occupant Forms Submitted 03

VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 03800
3836 Code weight to nearest 100 pounds.
 (010) Less than 1050 pounds
 (135) 13,500 pounds or more
 (999) Unknown
 Source:
20. Vehicle Cargo Weight 0000
N/A Code weight to nearest 100 pounds.
 (00) Less than 50 pounds
 (97) 9,650 pounds or more
 (99) Unknown

RECONSTRUCTION DATA

21. Towed Trailing Unit 0
 (0) No towed unit
 (1) Yes—towed trailing unit
 (9) Unknown
22. Documentation of Trajectory Data for This Vehicle 0
 (0) No
 (1) Yes
23. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
 (0) Not collision (for highest delta V) with tree or pole
 (1) Not damaged
 (2) Cracked/sheared
 (3) Tilted <45 degrees
 (4) Tilted ≥45 degrees
 (5) Uprooted tree
 (6) Separated pole from base
 (7) Pole replaced
 (8) Other (specify):

 (9) Unknown

24. Rollover 0
 (0) No rollover (no overturning)

Rollover (primarily about the longitudinal axis)

- (1) Rollover, 1 quarter turn only
 (2) Rollover, 2 quarter turns
 (3) Rollover, 3 quarter turns
 (4) Rollover, 4 or more quarter turns (specify):

- (5) Rollover--end-over-end (i.e., primarily about the lateral axis)
 (9) Rollover (overturn), details unknown

OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) 0
 26. Rear Override/Underride (this Vehicle) 0

- (0) No override/underride, or not an end-to-end impact

Override (see specific CDC)

- (1) 1st CDC
 (2) 2nd CDC
 (3) Other not automated CDC (specify):

Underride (see specific CDC)

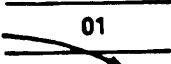

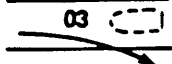
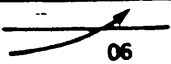

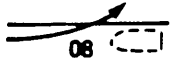
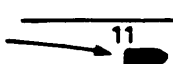
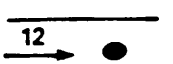
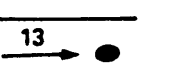
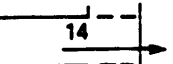
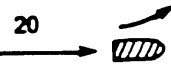
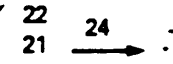
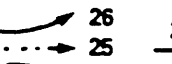
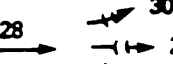


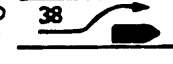
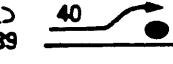
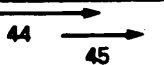
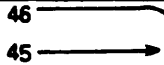

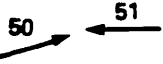





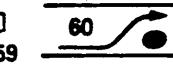
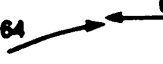


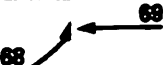
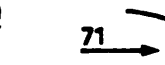
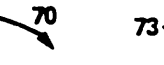
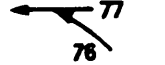
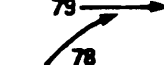

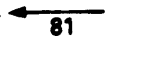
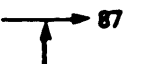

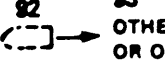

- (4) 1st CDC
 (5) 2nd CDC
 (6) Other not automated CDC (specify):

- (7) Medium/heavy truck or bus override
 (9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
 (997) Noncollision
 (998) Impact with object
 (999) Unknown

27. Heading Angle For This Vehicle 284
 28. Heading Angle For Other Vehicle 032

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I. Single Driver	A. Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B. Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C. Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II. Same Trafficway Same Direction	D. Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 25, 26, 27	 24 DECEL. 28, 30, 31	 26 AVOID COLLISION WITH VEH.	(EACH • 32) SPECIFICS OTHER (EACH • 33) SPECIFICS UNKNOWN
	E. Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER (EACH • 43) SPECIFICS UNKNOWN
	F. Sideswipe Angle	 44 45	 46 45 47	 48 45 47	(EACH • 48) SPECIFICS OTHER	(EACH • 49) SPECIFICS UNKNOWN
III. Same Trafficway Opposite Direction	G. Head-On	 50 LATERAL MOVE	 51 (EACH • 52) SPECIFICS OTHER	 53 (EACH • 53) SPECIFICS UNKNOWN		
	H. Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	(EACH • 62) SPECIFICS OTHER (EACH • 63) SPECIFICS UNKNOWN
	I. Sideswipe/Angle	 64 LATERAL MOVE	 65 (EACH • 66) SPECIFICS OTHER	 67 (EACH • 67) SPECIFICS UNKNOWN		
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 70 INITIAL SAME DIRECTIONS	 72 73	(EACH • 74) SPECIFICS OTHER (EACH • 75) SPECIFICS UNKNOWN	
	K. Turn Into Path	 76 TURN INTO SAME DIRECTION	 78 79	 80 TURN INTO OPPOSITE DIRECTIONS	 82 83	(EACH • 84) SPECIFICS OTHER (EACH • 85) SPECIFICS UNKNOWN
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	 87 88	 89 88	(EACH • 90) SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN	
VI. Miscellaneous	M. Backing Etc	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

29. Basis for Total Delta V (highest) 1*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

Delta V Not Calculated

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

COMPUTER GENERATED DELTA V

30. Total Delta V

Secondary Highest

15 Nearest mph

(NOTE: 00 means less than
0.5 mph)
(97) 96.5 mph and above
(99) Unknown

31. Longitudinal Component of
Delta V+ 0 13-13 Nearest mph

(NOTE: __00 means greater than
-0.5 and less than +0.5 mph)
(±97) ±96.5 mph and above
(__99) Unknown

Secondary Highest

32. Lateral Component of Delta V

⊕ 08 Nearest mph

(NOTE: __00 means greater than
-0.5 and less than +0.5 mph)
(±97) ±96.5 mph and above
(__99) Unknown

33. Energy Absorption

037,1003712 Nearest 100 foot-lbs

(NOTE: 0000 means less than 50 foot-lbs)
(9997) 999,650 foot-lbs or more
(9999) Unknown

34. Confidence In Reconstruction Program
Results (For Highest Delta V)

- (0) No reconstruction
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

35. Type of Vehicle Inspection

- (0) No inspection
- (1) Complete inspection
- (2) Partial inspection (specify):

36. Is this an AOPS Vehicle?

- (0) No
- (1) Yes

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [] YES [✓] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [] YES [] NO

37. Police Reported Other Drug Presence 0

- (0) No other drugs present
- (1) Yes (other drug present)
- (7) Not reported
- (8) No driver present
- (9) Unknown

38. Police Reported Observation/Perception Test Type For Driver 0

- (0) No observation/perception test given
- (1) Drug recognition technician (DRT) determination using DEC process
- (2) Behavioral
- (3) Other physical observation/perception determination (specify): _____
- (4) DEC process available, unknown if determination made
- (5) DEC process not available, unknown if other observation/perception test given
- (7) Other observation/perception test (specify): _____
- (8) No driver present

39. Other Drug Specimen Test Type For Driver 0

- (0) No specimen test given
- (1) Blood test
- (2) Urine test
- (3) Other specimen tests (specify): _____
- (7) Unspecified specimen test
- (8) No driver present
- (9) Unknown if specimen test given

DRUG EVALUATION CLASSIFICATION
OTHER DRUGS TEST RESULTS FOR DRIVER

DEC			
Observation/		Specimen	
Perception		Test	
Test Results		Results	
Narcotic Drug	40. <u>0</u>	41. <u>0</u>	
Depressant Drug	42. <u>0</u>	43. <u>0</u>	
Stimulant Drug	44. <u>0</u>	45. <u>0</u>	
Hallucinogen Drug	46. <u>0</u>	47. <u>0</u>	
Cannabinoid Drug	48. <u>0</u>	49. <u>0</u>	
Phencyclidine (PCP)	50. <u>0</u>	51. <u>0</u>	
Inhalant Drug	52. <u>0</u>	53. <u>0</u>	
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>0</u>	55. <u>0</u>	

Codes For Observation/Perception Test Results

- (0) No DEC observation/perception test given
- (1) Passed DEC observation/perception test
- (2) Failed DEC observation/perception test
- (3) DEC observation/perception test given—results unknown
- (8) No driver present
- (9) Unknown if DEC observation/perception test given

Codes for Specimen Test Results

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or not obtained
- (8) No driver present
- (9) Unknown if specimen test given

OTHER DATA**56. Driver's Zip Code**

- (00000) Driver not present
 (00001) Driver not a resident of U.S. or territories
 Code actual 5-digit zip code
 (99999) Unknown

57. Driver's Race/Ethnic Origin

- (0) Driver not present
 (1) White (non-Hispanic)
 (2) Black (non-Hispanic)
 (3) White (Hispanic)
 (4) Black (Hispanic)
 (5) American Indian, Eskimo or Aleut
 (6) Asian or Pacific Islander
 (8) Other (specify):
 (9) Unknown

58. Vehicle Special Use (This Trip)

- (0) No special use
 (1) Taxi
 (2) Vehicle used as school bus
 (3) Vehicle used as other bus
 (4) Military
 (5) Police
 (6) Ambulance
 (7) Hearse
 (8) Fire truck or car
 (9) Unknown

61. Rollover Initiation Object Contacted**62. Location on Vehicle Where Initial Principal Tripping Force Is Applied**

- (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify):
 (8) Non-contact rollover forces (specify):
 (9) Unknown

63. Direction of Initial Roll

- (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (5) End-over-end (i.e., primarily about the lateral axis)
 (9) Unknown roll direction

ROLLOVER DATA

If GV07 (Body Type) \neq 1-49, leave GV59-GV63 blank.
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.
 If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type

- (0) No rollover
 (1) Trip-over
 (2) Flip-over
 (3) Turn-over
 (4) Climb-over
 (5) Fall-over
 (6) Bounce-over
 (7) Collision with another vehicle
 (8) Other rollover initiation type (specify):
 (9) Unknown rollover initiation type

60. Location of Rollover Initiation

- (0) No rollover
 (1) On roadway
 (2) On shoulder—paved
 (3) On shoulder—unpaved
 (4) On roadside or divided trafficway median
 (9) Unknown

64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight
 (02) Slowing or stopping in traffic lane
 (03) Starting in traffic lane
 (04) Stopped in traffic lane
 (05) Passing or overtaking another vehicle
 (06) Disabled or parked in travel lane
 (07) Leaving a parking position
 (08) Entering a parking position
 (09) Turning right
 (10) Turning left
 (11) Making a U-turn
 (12) Backing up (other than for parking position)
 (13) Negotiating a curve
 (14) Changing lanes
 (15) Merging
 (16) Successful avoidance maneuver to a previous critical event
 (97) Other (specify):
 (98) No driver present
 (99) Unknown

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

Noncollision

- (31) Turn-over — fall-over
- (33) Jackknife

Collision With Fixed Object

- (41) Tree (≤ 4 inches in diameter)
- (42) Tree (> 4 inches in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (≤ 4 inches in diameter)
- (51) Pole or post (> 4 inches but ≤ 12 inches in diameter)
- (52) Pole or post (> 12 inches in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)
(specify): _____

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____

- (69) Unknown fixed object

Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (88) Other nonfixed object (specify): _____

- (89) Unknown nonfixed object

- (98) Other event (specify): _____

- (99) Unknown event or object

PRECRASH DATA (Continued)**65. Critical Precrash Event**15*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): _____
- (09) Unknown cause of control loss

This Vehicle Traveling

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

Other Motor Vehicle In Lane

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

Other Motor Vehicle Encroaching Into Lane

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

Pedestrian or Pedalcyclist, or Other Nonmotorist

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian - unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

Object or Animal

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): _____
- (99) Unknown

For Corrective Actions Attempted see variable GV14 (Attempted Avoidance Manuever)

66. Precrash Stability After Avoidance Maneuver0

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): _____
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action)0

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35=0), ***
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM**

Administration		Stratum Worksheet Summary	
1. Primary Sampling Unit Number	____	3. Vehicle Number	<u>01</u>
2. Case Number - Stratum	<u>92-22</u>		

VEHICLE IDENTIFICATION

VIN 2MECM75F1MX _____ Model Year 91
Vehicle Make (specify): MERCURY Vehicle Model (specify): GRAND MARQUIS LS

LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	LF FENDER AND DOOR, STARTS 36.25" FORWARD OF BALL JOINT, EXTENDS 22.5" REARWARD	SAME AS DIRECT
2	SIDESLAP, 121.25". BEGINS 74" FORWARD OF L-AXLE	SAME AS DIRECT

CRUSH PROFILE

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

[illegible]

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision

- (31) Overturn — rollover
 (32) Fire or explosion
 (33) Jackknife
 (34) Other intraunit damage (specify):

- (35) Noncollision injury
 (38) Other noncollision (specify):

- (39) Noncollision — details unknown

Collision With Fixed Object

- (41) Tree (≤ 4 inches in diameter)
 (42) Tree (> 4 inches in diameter)
 (43) Shrubbery or bush
 (44) Embankment

- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (≤ 4 inches in diameter)
 (51) Pole or post (> 4 inches but ≤ 12 inches in diameter)
 (52) Pole or post (> 12 inches in diameter)
 (53) Pole or post (diameter unknown)
 (54) Concrete traffic barrier
 (55) Impact attenuator
 (56) Other traffic barrier (includes guardrail) (specify):

- (57) Fence
 (58) Wall
 (59) Building
 (60) Ditch or culvert
 (61) Ground
 (62) Fire hydrant
 (63) Curb
 (64) Bridge
 (68) Other fixed object (specify):

- (69) Unknown fixed object

Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
 (72) Pedestrian
 (73) Cyclist or cycle
 (74) Other nonmotorist or conveyance

- (75) Vehicle occupant
 (76) Animal
 (77) Train
 (78) Trailer, disconnected in transport
 (88) Other nonfixed object (specify):

- (89) Unknown nonfixed object

- (98) Other event (specify):

- (99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01	02	300	00	L	Y	E	W	03
02	02	270	00	L	Z	M	W	01
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>02</u>	6. <u>10</u>	7. <u>L</u>	8. <u>Y</u>	9. <u>E</u>	10. <u>W</u>	11. <u>03</u>

Second Highest Delta "V"

12. <u>02</u>	13. <u>02</u>	14. <u>09</u>	15. <u>L</u>	16. <u>Z</u>	17. <u>M</u>	18. <u>W</u>	19. <u>01</u>
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CRUSH PROFILE

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN INCHES.)

HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	22. <u>±D</u>
<u>073</u>	<u>03</u>	<u>08</u>	<u>10</u>	<u>11</u>	<u>09</u>	<u>01</u>	<u>⊕</u> <u>-052</u>

Second Highest Delta "V"

23. <u>L</u>	24. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	25. <u>±D</u>
<u>121</u>	<u>00</u>	<u>00</u>	<u>00</u>	<u>00</u>	<u>00</u>	<u>01</u>	<u>⊕</u> <u>0044</u>

26. Are CDCs Documented but Not Coded on The Automated File? 0
(0) No
(1) Yes

27. Researcher's Assessment of Vehicle Disposition 1
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

28. Original Wheelbase 114.3
114.3" Code to the nearest tenth of an inch
(9999) Unknown

29. Is This A Multi-Stage Manufactured Vehicle
And/Or A Certified Altered Vehicle?

0

- (0) No post manufacturer modifications
(1) Yes - post manufacturer modifications
(specify): _____

(Include photograph of CERTIFICATION
PLACARD in case report)

(9) Unknown if vehicle is modified

30. Fire Occurrence

0

(0) No fire

Yes, fire occurred

- (1) Minor
(2) Major
(9) Unknown

31. Origin of Fire

0

- (0) No fire
(1) Vehicle exterior (front, side, back, top)
(2) Exhaust system
(3) Fuel tank (and other fuel retention
system parts)
(4) Engine compartment
(5) Cargo/trunk compartment
(6) Instrument panel
(7) Passenger compartment area
(8) Other location (specify): _____

(9) Unknown

32. Type of Fuel Tank

1

- (0) No fuel tank (electrical vehicle)
(1) Metallic
(2) Non-metallic
(9) Unknown

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS ***
(I.E., GV09 = 0 OR 9 AND GV36 = 0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



U.S. Department of Transportation

National Highway Traffic Safety
Administration

INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - ~~Stratum~~

3. Vehicle Number

INTEGRITY

4. Passenger Compartment Integrity

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 3 6. RF 1 7. LR 1 8. RR 1 9. TG/H 0

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

LF DOOR FORCED OPEN POST-CRASH

Damage/Failure Associated with Door, Tailgate or Hatch
Opening in Collision. If IV05-IV09 \neq 2, Then code 010. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail,
etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

GLAZING

Glazing Damage from Impact Forces

15. WS 2 16. LF 6 17. RF 0 18. LR 0 19. RR 020. BL 0 21. Roof 8 22. Other 8

(0) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from
impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(8) No glazing

(9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 0 24. LF 0 25. RF 0 26. LR 0 27. RR 028. BL 0 29. Roof 0 30. Other 0

(0) No occupant contact to glazing or no glazing

(1) Glazing contacted by occupant but no glazing damage

(2) Glazing in place and cracked by occupant contact

(3) Glazing in place and holed by occupant contact

(4) Glazing out-of-place (cracked or not) by occupant
contact and not holed by occupant contact(5) Glazing out-of-place by occupant contact and holed by
occupant contact

(6) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

If No Glazing Damage **And** No Occupant Contact or No
Glazing, Then Code IV31 Through IV46 As 0

Type of Window/Windshield Glazing

31. WS 1 32. LF 2 33. RF 2 34. LR 2 35. RR 236. BL 2 37. Roof 0 38. Other 0

(0) No glazing contact and no damage, or no glazing

(1) AS-1 — Laminated

(2) AS-2 — Tempered

(3) AS-3 — Tempered-tinted

(4) AS-14 — Glass/Plastic

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

39. WS 1 40. LF 2 41. RF 2 42. LR 2 43. RR 244. BL 1 45. Roof 0 46. Other 0

(0) No glazing contact and no damage, or no glazing

(1) Fixed

(2) Closed

(3) Partially opened

(4) Fully opened

(9) Unknown

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>1 1 1</u>	48. <u>06</u>	49. <u>2</u> (3")	50. <u>3</u>
2nd	51. <u>1 1 1</u>	52. <u>10</u>	53. <u>2</u> (3")	54. <u>3</u>
3rd	55. <u>1 1 1</u>	56. <u>27</u>	57. <u>2</u> (3")	58. <u>3</u>
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

LOCATION OF INTRUSION

Front Seat
 (11) Left
 (12) Middle
 (13) Right

Second Seat
 (21) Left
 (22) Middle
 (23) Right

Third Seat
 (31) Left
 (32) Middle
 (33) Right

Fourth Seat
 (41) Left
 (42) Middle
 (43) Right

(97) Catastrophic
 (98) Other enclosed area (specify)

(99) Unknown

INTRUDING COMPONENT

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify): _____

- (27) Side panel - forward of the A-pillar
- (28) Side panel - rear of the A-pillar

Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

MAGNITUDE OF INTRUSION

- (1) ≥ 1 inch but < 3 inches
- (2) ≥ 3 inches but < 6 inches
- (3) ≥ 6 inches but < 12 inches
- (4) ≥ 12 inches but < 18 inches
- (5) ≥ 18 inches but < 24 inches
- (6) ≥ 24 inches
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING COLUMN87. Steering Column Type 2

- (1) Fixed column
 (2) Tilt column
 (3) Telescoping column
 (4) Tilt and telescoping column
 (8) Other column type (specify): _____

(9) Unknown

88. Blank X X

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-91 CDS.

89. Blank X X X

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-91 CDS.

90. Blank X X X

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-91 CDS.

91. Blank X X X

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-91 CDS.

92. Steering Rim/Spoke Deformation 0

Code actual measured

deformation to the nearest inch.

(0) No steering rim deformation

(1-5) Actual measured value

(6) 6 inches or more

(8) Observed deformation cannot be measured

(9) Unknown

93. Location of Steering Rim/Spoke Deformation 0 0

(00) No steering rim deformation

Quarter Sections

(01) Section A

(02) Section B

(03) Section C

(04) Section D

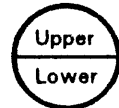
*Half Sections*

(05) Upper half of rim/spoke

(06) Lower half of rim/spoke

(07) Left half of rim/spoke

(08) Right half of rim/spoke



(09) Complete steering wheel collapse

(10) Undetermined location

(99) Unknown

INSTRUMENT PANEL94. Odometer Reading 0 1 1,000

11,127 miles—Code mileage to the
 nearest 1,000 miles

(000) No odometer

(001) Less than 1,500 miles

(300) 299,500 miles or more

(999) Unknown

Source: _____

95. Instrument Panel Damage from Occupant Contact? 0

(0) No

(1) Yes

(9) Unknown

96. Knee Bolsters Deformed from Occupant Contact? 0

(0) No

(1) Yes

(8) Not present

(9) Unknown

97. Did Glove Compartment Door Open During Collision(s)? 1

(0) No

(1) Yes

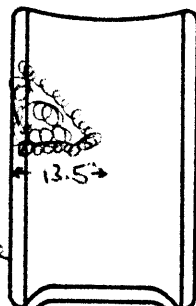
(8) Not present

(9) Unknown

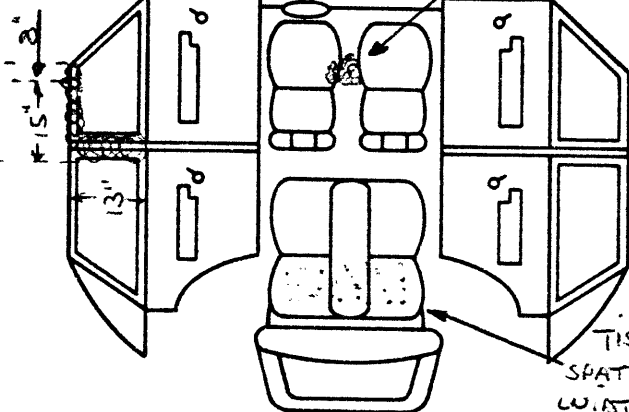
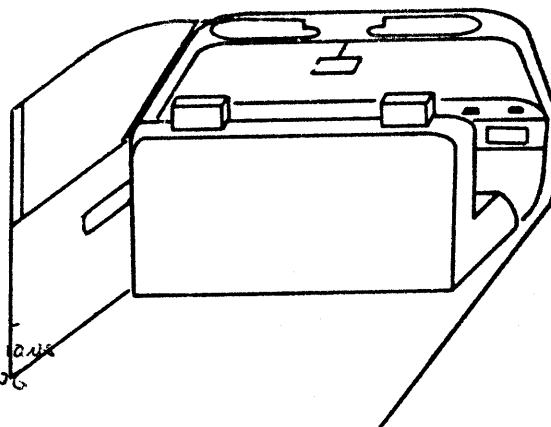
VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment

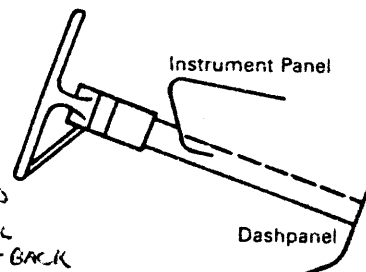
TRIANGULAR AREA
OF TISSUE/BODY
FLUIDS ON LEFT
SIDERAIL, HEADLINER,
AND B-PILLAR AREA
EXTENDS 8'5"
REARWARD OF A-PILLAR
13.5" INBOARD ONTO
HEADLINER, 13" DOWN
ONTO B-PILLAR



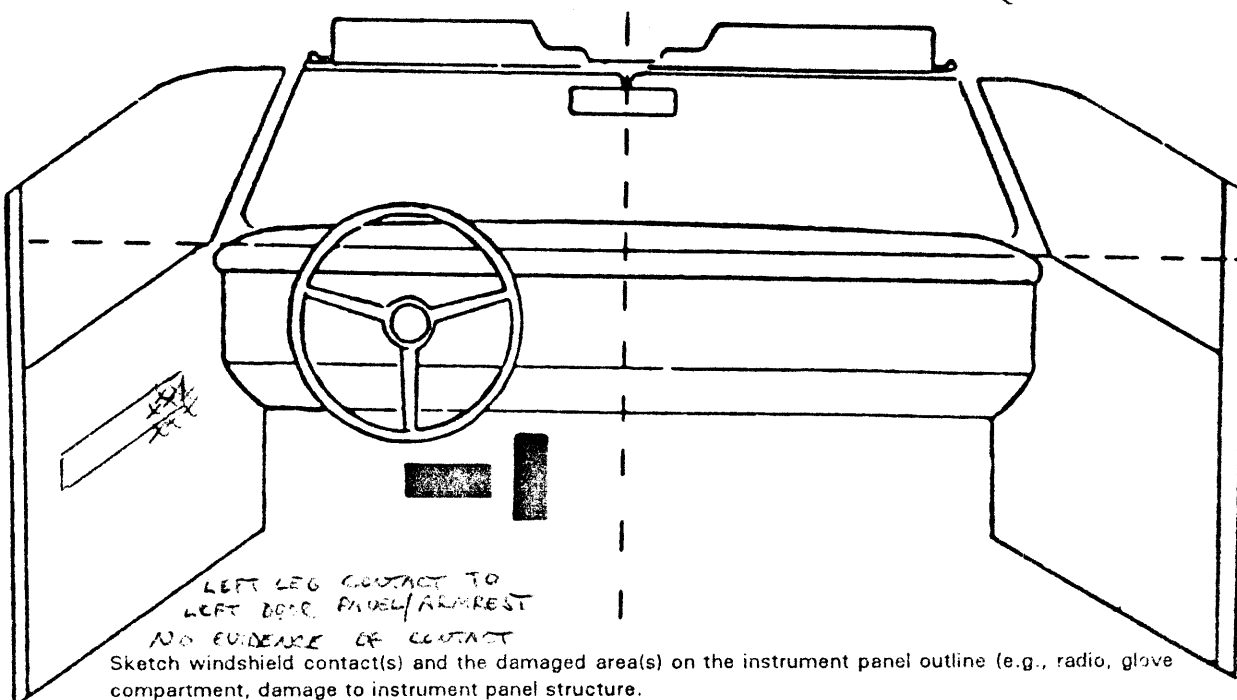
BLOOD ON SEAT CUSHION
AND LF BEET WEBBING



TISSUE/BODY FLUID
SPATTERS OVER FULL
WIDTH OF REAR SEAT BACK



TISSUE AND BLOOD ON
AIR BAG (SEE APPENDIX B)



LEFT LEG CONTACT TO
LEFT DOOR PANEL/ARMREST
NO EVIDENCE OF CONTACT

Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	45	1	(R) FOREARM	TISSUE / BLOOD	1
B	20/21	1	(D) KNEE/LEG	NO EVIDENCE OF CONTACT	1
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify): _____
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (27) Other left side object (specify): _____

- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify): _____
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (37) Other right side object (specify): _____
- (38) Right side window sill

INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air bag
- (46) Other occupants (specify): _____
- (47) Interior loose objects

- (48) Child safety seat (specify): _____

- (49) Other interior object (specify): _____

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Left	Right
FIRST	Availability/Function	1	0
	Deployment	1	0
	Failure	1	0

Air Bag System Availability/Function

- (0) Not equipped/not available
(1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled
(9) Unknown

Air Bag System Deployment

- (0) Not equipped/not available
(1) Air bag deployed during accident (as a result of impact)
(2) Air bag deployed inadvertently just prior to accident
(3) Air bag deployed, accident sequence undetermined
(4) Nondeployed
(5) Unknown if deployed
(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(9) Unknown

Did Air Bag System Fail?

- (0) Not equipped/not available
(1) No
(2) Yes (specify):

(9) Unknown

AUTOMATIC BELTS

		Left	Right
FIRST	Availability/Function	0	0
	Use	0	0
	Type	0	0
	Proper Use	0	0
	Failure Modes	0	0

Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
(9) Unknown

Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)
(3) Automatic belt use unknown
(9) Unknown

Automatic (Passive) Belt System Type

- (0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of automatic belt system (specify):

(9) Unknown

Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify):

(6) Broken retractor
(7) Combination of above (specify):

(8) Other automatic belt failure (specify):

(9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	3	4
	Use	04	03	04
	Failure Modes	1	1	1
SECOND	Availability	4	3	4
	Use <i>REAR SEAT NOT</i>	—	—	—
	Failure Modes <i>OCCUPIED</i>	—	—	—
THIRD	Availability	X		
	Use			
	Failure Modes			
OTHER	Availability			
	Use			
	Failure Modes			

Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): _____
- (02) Shoulder belt _____
- (03) Lap belt _____
- (04) Lap and shoulder belt _____
- (05) Belt used - type unknown _____

(08) Other belt used (specify): _____

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor _____
- (7) Combination of above (specify): _____
- (8) Other manual belt failure (specify): _____
- (9) Unknown _____

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

NONE USED

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat

Designed for Rear Facing for This Age/Weight

- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3	0	3
	Seat Type	06	06	06
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
SECOND	Head Restraint Type/Damage	03	03	03
	Seat Type	03	03	03
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify: _____

(9) Unknown _____

Seat Type (this Occupant Position)

- (00) No seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____

(10) Box mounted seat (i.e., van type) _____

(99) Unknown _____

Seat Performance (this Occupant Position)

- (0) No seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify: _____
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____

(7) Combination of above (specify): _____

(8) Other (specify): _____

(9) Unknown _____

Seat Orientation (this Occupant Position)

- (0) No seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____

(9) Unknown _____

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [☒] Yes []

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection

- (1) Complete ejection
(1) Partial ejection
(3) Ejection, Unknown degree
(9) Unknown

Ejection Area

- (1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear

(7) Roof

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown**Ejection Medium**

- (1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify):

(5) Integral structure

- (8) Other medium (specify):

(9) Unknown**Medium Status (Immediately Prior to Impact)**

- (1) Open
(2) Closed
(3) Integral structure
(9) Unknown

ENTRAPMENT No [☒] Yes []

Describe entrapment mechanism: _____

Component(s): _____

(Note in vehicle interior diagram)

APPENDIX E

NASS Occupant Forms
(Air Bag Vehicle)



OCCUPANT ASSESSMENT FORM

<p>1. Primary Sampling Unit Number _____</p> <p>2. Case Number - Stratum <u>92-22</u></p> <p>3. Vehicle Number <u>01</u></p> <p>4. Occupant Number <u>01</u></p> <p style="text-align: center;">OCCUPANT'S CHARACTERISTICS</p> <p>5. Occupant's Age <u>23</u> Code actual age at time of accident. (00) Less than one year old (specify by month): (97) 97 years and older _____ (99) Unknown _____</p> <p>6. Occupant's Sex <u>2</u> (1) Male (2) Female (9) Unknown</p> <p>7. Occupant's Height <u>(4'11") 59"</u> Code actual height to the nearest inch. (99) Unknown</p> <p>8. Occupant's Weight <u>125</u> Code actual weight to the nearest pounds. (999) Unknown</p> <p>9. Occupant's Role <u>1</u> (1) Driver (2) Passenger (9) Unknown</p> <p>10. Occupant's Seat Position <u>11</u> <i>Front Seat</i> (11) Left side (12) Middle (13) Right side (14) Other (specify): _____ (15) On or in the lap of another occupant _____ <i>Second Seat</i> (21) Left side (22) Middle (23) Right side (24) Other (specify): _____ (25) On or in the lap of another occupant _____ <i>Third Seat</i> (31) Left side (32) Middle (33) Right side (34) Other (specify): _____ (35) On or in the lap of another occupant _____ <i>Fourth Seat</i> (41) Left side (42) Middle (43) Right side (44) Other (specify): _____ (45) On or in the lap of another occupant _____ (97) In or on unenclosed area (98) Other seat (specify): _____ (99) Unknown</p>	<p>11. Occupant Posture <u>0</u> (0) Normal posture (1) Abnormal posture (specify): _____ (9) Unknown</p> <p style="text-align: center;">EJECTION/ENTRAPMENT</p> <p>12. Ejection <u>0</u> (0) No ejection (1) Complete ejection (2) Partial ejection (3) Ejection, unknown degree (9) Unknown</p> <p>13. Ejection Area <u>0</u> (0) No ejection (1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear (7) Roof (8) Other area (e.g., back of pickup, etc.) (specify): _____ (9) Unknown</p> <p>14. Ejection Medium <u>0</u> (0) No ejection (1) Door/hatch/tailgate (2) Nonfixed roof structure (3) Fixed glazing (4) Nonfixed glazing (specify): _____ (5) Integral structure (8) Other medium (specify): _____ (9) Unknown</p> <p>15. Medium Status (Immediately Prior To Impact) <u>0</u> (0) No ejection (1) Open (2) Closed (3) Integral structure (9) Unknown</p> <p>16. Entrapment <u>0</u> (NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.) (0) Not entrapped (1) Entrapped (9) Unknown</p>
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RESTRAINT SYSTEM AND SEAT EVALUATION**17. Manual (Active) Belt System Availability** 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown

18. Manual (Active) Belt System Use 04

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

(02) Shoulder belt

(03) Lap belt

(04) Lap and shoulder belt

(05) Belt used—type unknown

(08) Other belt used (specify): _____

(12) Shoulder belt used with child safety seat

(13) Lap belt used with child safety seat

(14) Lap and shoulder belt used with child safety seat

(15) Belt used with child safety seat—type unknown

(18) Other belt used with child safety seat (specify): _____

(99) Unknown if belt used

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown

21. Air Bag System Availability/Function 1

- (0) Not equipped/not available
- (1) Air bag

Non-functional

(2) Air bag disconnected (specify): _____

(3) Air bag not reinstalled

(9) Unknown

22. Air Bag System Deployment 1

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Did Air Bag System Fail? 1

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____

(9) Unknown

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): _____

(8) Restrained, type unknown

(9) Police indicated "unknown"

25. Head Restraint Type/Damage by Occupant at This Occupant Position 3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): _____

(9) Unknown

26. Seat Type (this Occupant Position) 06
- (00) Occupant not seated or no seat
 (01) Bucket
 (02) Bucket with folding back
 (03) Bench
 (04) Bench with separate back cushions
 (05) Bench with folding back(s)
 (06) Split bench with separate back cushions
 (07) Split bench with folding back(s)
 (08) Pedestal (i.e., column supported)
 (09) Other seat type (specify): _____
 (10) Box mounted seat (i.e., van type)
 (99) Unknown
27. Seat Performance (this Occupant Position) 1
- (0) Occupant not seated or no seat
 (1) No seat performance failure(s)
 (2) Seat adjusters failed
 (3) Seat back folding locks or "seat back" failed
 (4) Seat track/anchors failed
 (5) Deformed by impact of occupant
 (6) Deformed by passenger compartment intrusion (specify): _____

 (7) Combination of above (specify): _____
 (8) Other (specify): _____
 (9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 000
- (000) No child safety seat
 Applicable codes are found in your NASS CDS Data Collection, Coding and Editing
 (950) Built-in child safety seat
 (997) Other make/model (specify): _____
 (998) Unknown make/model
 (999) Unknown if child safety seat used
29. Type of Child Safety Seat 0
- (0) No child safety seat
 (1) Infant seat
 (2) Toddler seat
 (3) Convertible seat
 (4) Booster seat
 (7) Other type child safety seat (specify): _____
 (8) Unknown child safety seat type
 (9) Unknown if child safety seat used

30. Child Safety Seat Orientation 00
- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight*
 (01) Rear facing
 (02) Forward facing
 (08) Other orientation (specify): _____
 (09) Unknown orientation
- Designed For Forward Facing for This Age/Weight*
 (11) Rear facing
 (12) Forward facing
 (18) Other orientation (specify): _____
 (19) Unknown orientation
- Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*
 (21) Rear facing
 (22) Forward facing
 (28) Other orientation (specify): _____
 (29) Unknown orientation
 (99) Unknown if child safety seat used
31. Child Safety Seat Harness Usage 00
32. Child Safety Seat Shield Usage 00
33. Child Safety Seat Tether Usage 00
- Note: Options below applicable to Variables OA31-OA33.
 (00) No child safety seat
- Not Designed With Harness/Shield/Tether*
 (01) After market harness/shield/tether added, not used
 (02) After market harness/shield/tether used
 (03) Child safety seat used, but no after market harness/shield/tether added
 (09) Unknown if harness/shield/tether added or used
- Designed With Harness/Shield/Tether*
 (11) Harness/shield/tether not used
 (12) Harness/shield/tether used
 (19) Unknown if harness/shield/tether used
- Unknown If Designed With Harness/Shield/Tether*
 (21) Harness/shield/tether not used
 (22) Harness/shield/tether used
 (29) Unknown if harness/shield/tether used
 (99) Unknown if child safety seat used

INJURY CONSEQUENCES34. Injury Severity (Police Rating) 3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify): _____
- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify): _____
- (9) Unknown

37. Hospital Stay 13

- (00) Not Hospitalized
- _____ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 00

- _____ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more *RETIRED*
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

39. Time to Death 00

- _____ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

- _____ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
- (97) Other result (specify): _____
- (99) Unknown

43. Number of Recorded Injuries for This Occupant 07

- _____ Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

AUTOMATIC BELT SYSTEM**44. Automatic (Passive) Belt System Availability/ Function** 0

- (0) Not equipped/not available
 (1) 2 point automatic belts
 (2) 3 point automatic belts
 (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
 (9) Unknown

45. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
 (1) Automatic belt in use
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):

- (3) Automatic belt use unknown
 (9) Unknown

46. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
 (1) Non-motorized system
 (2) Motorized system
 (9) Unknown

47. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
 (1) Automatic belt used properly
 (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
 (4) Automatic shoulder belt worn behind back
 (5) Automatic belt worn around more than one person
 (6) Lap portion of automatic belt worn on abdomen
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):
 (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
 (1) No automatic belt failure(s)
 (2) Torn webbing (stretched webbing not included)
 (3) Broken buckle or latchplate
 (4) Upper anchorage separated
 (5) Other anchorage separated (specify):
 (6) Broken retractor
 (7) Combination of above (specify):
 (8) Other automatic belt failure (specify):
 (9) Unknown

49. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):

- (9) Unknown

TRAUMA DATA**50. Glasgow Coma Scale (GCS) Score (at Medical Facility)** 0 2

- (00) Not injured
 (01) Injured - not treated at medical facility
 (02) No GCS Score at medical facility
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
 (97) Injured, details unknown
 (99) Unknown if injured

51. Was the Occupant Given Blood? 1

- (1) No - blood not given
 (2) Yes - blood given (specify units):
 (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO₃ 2 8

- (00) Not injured
 (01) Injured, ABGs not measured or reported
 (02-50) Code the actual value of the HCO₃
 (96) ABGs reported, HCO₃ unknown
 (97) Injured, details unknown
 (99) Unknown if injured

UPDATE CANDIDATE? NO [☒] YES []OCCUPANT INJURY FORM INCLUDED WITH INITIAL SUBMISSION? NO [] YES [☒]

*** STOP HERE ***
 IF THERE ARE NO RECORDED INJURIES
 (I.E., OA43 = 00,97,99)



OCCUPANT INJURY FORM

1. Primary Sampling Unit Number _____	3. Vehicle Number <u>01</u>
2. Case Number - Stratum <u>92-22</u>	4. Occupant Number <u>01</u>

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	O.I.C.-A.I.S					Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
		Body Region	Aspect	Lesion	System Organ	A.I.S. Severity				
1st	5. <u>2</u>	6. <u>R</u>	7. <u>R</u>	8. <u>E</u>	9. <u>S</u>	10. <u>3</u>	11. <u>45</u>	12. <u>1</u>	13. <u>1</u>	14. <u>00</u>
2nd	15. <u>2</u>	16. <u>R</u>	17. <u>R</u>	18. <u>F</u>	19. <u>S</u>	20. <u>3</u>	21. <u>45</u>	22. <u>1</u>	23. <u>1</u>	24. <u>00</u>
3rd	25. <u>2</u>	26. <u>R</u>	27. <u>R</u>	28. <u>F</u>	29. <u>S</u>	30. <u>3</u>	31. <u>45</u>	32. <u>1</u>	33. <u>1</u>	34. <u>00</u>
4th	35. <u>2</u>	36. <u>R</u>	37. <u>R</u>	38. <u>V</u>	39. <u>I</u>	40. <u>2</u>	41. <u>45</u>	42. <u>1</u>	43. <u>1</u>	44. <u>00</u>
5th	45. <u>2</u>	46. <u>E</u>	47. <u>R</u>	48. <u>F</u>	49. <u>S</u>	50. <u>2</u>	51. <u>45</u>	52. <u>1</u>	53. <u>1</u>	54. <u>00</u>
6th	55. <u>2</u>	56. <u>W</u>	57. <u>R</u>	58. <u>F</u>	59. <u>S</u>	60. <u>1</u>	61. <u>45</u>	62. <u>1</u>	63. <u>1</u>	64. <u>00</u>
7th	65. <u>7</u>	66. <u>K</u>	67. <u>L</u>	68. <u>C</u>	69. <u>I</u>	70. <u>1</u>	71. <u>20</u>	72. <u>1</u>	73. <u>1</u>	74. <u>02</u>
8th	75. ____	76. ____	77. ____	78. ____	79. ____	80. ____	81. ____	82. ____	83. ____	84. ____
9th	85. ____	86. ____	87. ____	88. ____	89. ____	90. ____	91. ____	92. ____	93. ____	94. ____
10th	95. ____	96. ____	97. ____	98. ____	99. ____	100. ____	101. ____	102. ____	103. ____	104. ____

O.I.C.-A.I.S

		O.I.C.-A.I.S						Injury Source			
	Source of Injury Data	Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.	
11th	—	—	—	—	—	—	— —	—	—	— —	
12th	—	—	—	—	—	—	— —	—	—	— —	
13th	—	—	—	—	—	—	— —	—	—	— —	
14th	—	—	—	—	—	—	— —	—	—	— —	
15th	—	—	—	—	—	—	— —	—	—	— —	
16th	—	—	—	—	—	—	— —	—	—	— —	
17th	—	—	—	—	—	—	— —	—	—	— —	
18th	—	—	—	—	—	—	— —	—	—	— —	
19th	—	—	—	—	—	—	— —	—	—	— —	
20th	—	—	—	—	—	—	— —	—	—	— —	
21st	—	—	—	—	—	—	— —	—	—	— —	
22nd	—	—	—	—	—	—	— —	—	—	— —	
23rd	—	—	—	—	—	—	— —	—	—	— —	
24th	—	—	—	—	—	—	— —	—	—	— —	
25th	—	—	—	—	—	—	— —	—	—	— —	

AGE 73
 SEX Female
 WT. 125 lbs.
 HT. 59"

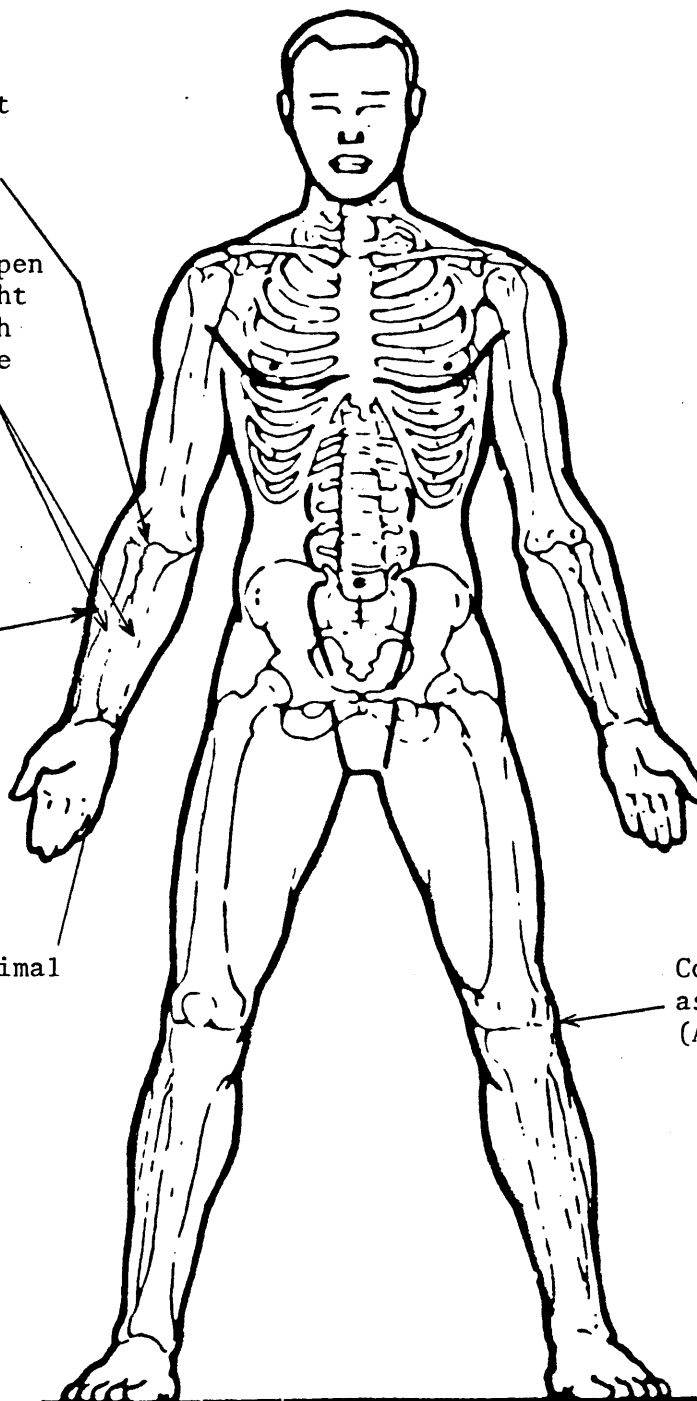
Fracture of the right olecranon (AIS-2), upper air bag module cover flap/air bag

Multiple segmental open fractures of the right radius and ulna, with fractures of both the distal and proximal ulna (AIS-3), upper air bag module cover flap/air bag

Circumferential degloving laceration involving the skin and subcutaneous tissue down to the muscle layer involving approximately 340° of the right forearm (AIS-2), upper air bag module cover flap/air bag

Fracture of the proximal phalanx of the right 5th digit (AIS-1), air bag

Contusion of the lateral aspect of the left knee (AIS-1), left door panel



SOURCE OF INJURY DATA

OFFICIAL

- (1) Autopsy records with or without hospital medical records
- (2) Hospital medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____
- (9) Police

INJURY SOURCE

FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify): _____

- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail.

- (27) Other left side object (specify): _____

- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify): _____

- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (37) Other right side object (specify): _____

- (38) Right side window sill

INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air bag
- (46) Other occupants (specify): _____
- (47) Interior loose objects
- (48) Child safety seat (specify): _____
- (49) Other interior object (specify): _____

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): _____
- (68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): _____

- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): _____

- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): _____

- (83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): _____
- (86) Unknown vehicle or object

NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): _____
- (93) Air bag exhaust gases
- (97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION

O.I.C. Body Region

- (M) Abdomen
- (Q) Ankle-foot
- (A) Arm (upper)
- (B) Back-thoracolumbar spine
- (C) Chest
- (E) Elbow
- (F) Face
- (R) Forearm
- (H) Head-skull
- (U) Injured, unknown region
- (K) Knee
- (L) Leg (lower)
- (Y) Lower limb(s) (whole or unknown part)
- (N) Neck-cervical spine
- (P) Pelvic-hip
- (S) Shoulder
- (T) Thigh
- (X) Upper limb(s) (whole or unknown part)
- (O) Whole body
- (W) Wrist-hand

Aspect of Injury

- (A) Anterior-front
- (B) Bilateral (rib fracture only)
- (C) Central
- (I) Inferior-lower
- (U) Injured, unknown aspect
- (L) Left
- (P) Posterior-back
- (R) Right
- (S) Superior-upper
- (W) Whole region

Lesion

- (A) Abrasion
- (M) Amputation
- (V) Avulsion
- (B) Burn
- (K) Concussion
- (C) Contusion
- (N) Crush
- (G) Detachment, separation
- (D) Dislocation

- (F) Fracture
- (Z) Fracture and dislocation
- (U) Injured, unknown lesion
- (L) Laceration
- (O) Other
- (P) Perforation, puncture
- (R) Rupture
- (S) Sprain
- (T) Strain
- (E) Total severance, transection

System/Organ

- (W) All systems in region
- (A) Arteries-veins
- (B) Brain
- (D) Digestive
- (E) Ears
- (O) Eye
- (H) Heart
- (U) Injured, unknown system
- (I) Integumentary
- (J) Joints
- (K) Kidneys

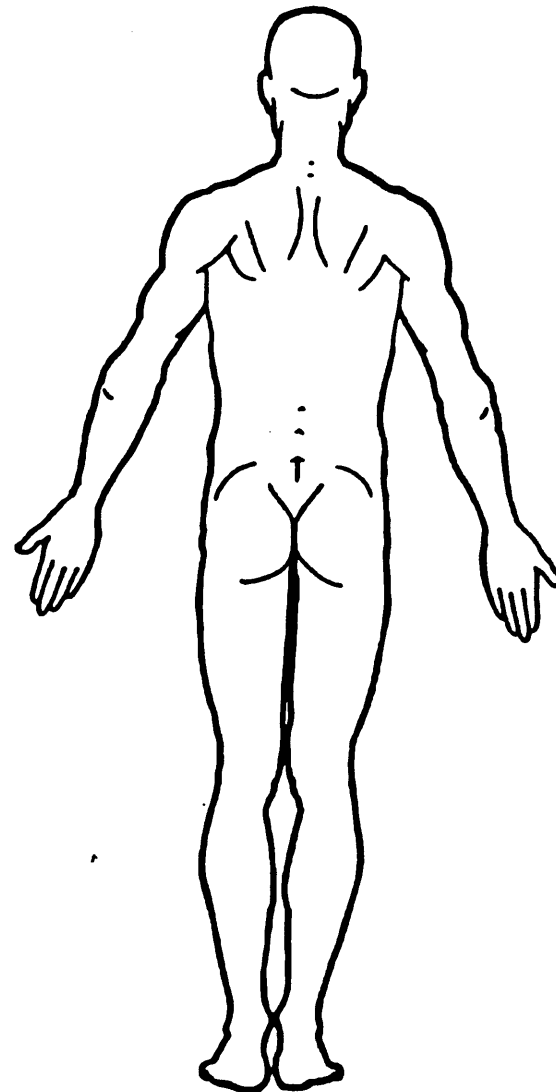
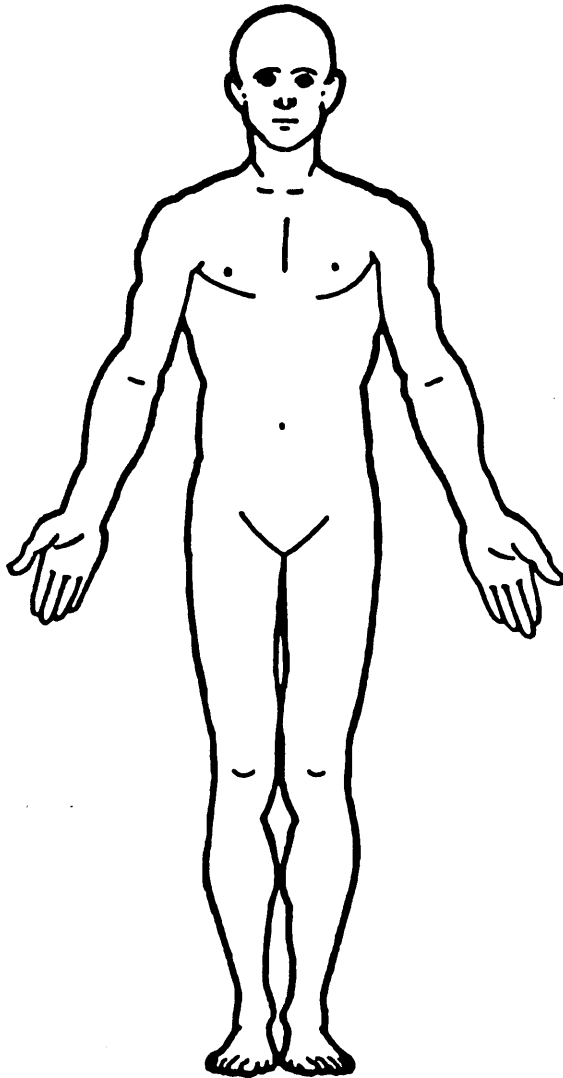
- (L) Liver
- (M) Muscles
- (N) Nervous system
- (P) Pulmonary-lungs
- (R) Respiratory
- (S) Skeletal
- (C) Spinal cord
- (Q) Spleen
- (T) Thyroid, other endocrine gland
- (V) Vertebrae

Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Lesion, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





OCCUPANT ASSESSMENT FORM

1. ~~Primary Sampling Unit Number~~ _____

2. Case Number - ~~Stratum~~ 92-22

3. Vehicle Number 01

4. Occupant Number 02

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 04
Code actual age at time of accident.
(00) Less than one year old (specify by month):

(97) 97 years and older
(99) Unknown

6. Occupant's Sex 1

(1) Male
(2) Female
(9) Unknown

7. Occupant's Height 42
Code actual height to the nearest inch.
(99) Unknown

8. Occupant's Weight 038
Code actual weight to the nearest pounds.
(999) Unknown

9. Occupant's Role 2

(1) Driver
(2) Passenger
(9) Unknown

10. Occupant's Seat Position 12

Front Seat

(11) Left side
(12) Middle
(13) Right side
(14) Other (specify):
(15) On or in the lap of another occupant

Second Seat

(21) Left side
(22) Middle
(23) Right side
(24) Other (specify):
(25) On or in the lap of another occupant

Third Seat

(31) Left side
(32) Middle
(33) Right side
(34) Other (specify):
(35) On or in the lap of another occupant

Fourth Seat

(41) Left side
(42) Middle
(43) Right side
(44) Other (specify):
(45) On or in the lap of another occupant

(97) In or on unenclosed area
(98) Other seat (specify):
(99) Unknown

11. Occupant Posture 0

(0) Normal posture
(1) Abnormal posture (specify):

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection 0

(0) No ejection
(1) Complete ejection
(2) Partial ejection
(3) Ejection, unknown degree
(9) Unknown

13. Ejection Area 0

(0) No ejection
(1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear
(7) Roof
(8) Other area (e.g., back of pickup, etc.)
(specify):
(9) Unknown

14. Ejection Medium 0

(0) No ejection
(1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify):
(5) Integral structure
(8) Other medium (specify):
(9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

(0) No ejection
(1) Open
(2) Closed
(3) Integral structure
(9) Unknown

16. Entrapment 0

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

(0) Not entrapped
(1) Entrapped
(9) Unknown

RESTRAINT SYSTEM AND SEAT EVALUATION**17. Manual (Active) Belt System Availability** 3

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown

18. Manual (Active) Belt System Use 03

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

(02) Shoulder belt

(03) Lap belt

(04) Lap and shoulder belt

(05) Belt used—type unknown

(08) Other belt used (specify): _____

(12) Shoulder belt used with child safety seat

(13) Lap belt used with child safety seat

(14) Lap and shoulder belt used with child safety seat

(15) Belt used with child safety seat—type unknown

(18) Other belt used with child safety seat (specify): _____

(99) Unknown if belt used

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown

21. Air Bag System Availability/Function 0

- (0) Not equipped/not available
- (1) Air bag

Non-functional

(2) Air bag disconnected (specify): _____

(3) Air bag not reinstalled

(9) Unknown

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Did Air Bag System Fail? 0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____

(9) Unknown

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt BOTH, ONLY LAP WAS AVAILABLE
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): _____

(8) Restrained, type unknown

(9) Police indicated "unknown"

25. Head Restraint Type/Damage by Occupant at This Occupant Position 0

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): _____

(9) Unknown

26. Seat Type (this Occupant Position) 06
- (00) Occupant not seated or no seat
 (01) Bucket
 (02) Bucket with folding back
 (03) Bench
 (04) Bench with separate back cushions
 (05) Bench with folding back(s)
 (06) Split bench with separate back cushions
 (07) Split bench with folding back(s)
 (08) Pedestal (i.e., column supported)
 (09) Other seat type (specify): _____
- (10) Box mounted seat (i.e., van type)
 (99) Unknown

27. Seat Performance (this Occupant Position) 1
- (0) Occupant not seated or no seat
 (1) No seat performance failure(s)
 (2) Seat adjusters failed
 (3) Seat back folding locks or "seat back" failed
 (4) Seat track/anchors failed
 (5) Deformed by impact of occupant
 (6) Deformed by passenger compartment intrusion (specify): _____
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 000
- (000) No child safety seat
 Applicable codes are found in your NASS CDS Data Collection, Coding and Editing
 (950) Built-in child safety seat
 (997) Other make/model (specify): _____
- (998) Unknown make/model
 (999) Unknown if child safety seat used

29. Type of Child Safety Seat 0
- (0) No child safety seat
 (1) Infant seat
 (2) Toddler seat
 (3) Convertible seat
 (4) Booster seat
 (7) Other type child safety seat (specify): _____
- (8) Unknown child safety seat type
 (9) Unknown if child safety seat used

30. Child Safety Seat Orientation 00
- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight*
 (01) Rear facing
 (02) Forward facing
 (08) Other orientation (specify): _____
- (09) Unknown orientation
- Designed For Forward Facing for This Age/Weight*
 (11) Rear facing
 (12) Forward facing
 (18) Other orientation (specify): _____
- (19) Unknown orientation
- Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*
 (21) Rear facing
 (22) Forward facing
 (28) Other orientation (specify): _____
- (29) Unknown orientation
- (99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 00
32. Child Safety Seat Shield Usage 00
33. Child Safety Seat Tether Usage 00
- Note: Options below applicable to Variables OA31-OA33.
 (00) No child safety seat

- Not Designed With Harness/Shield/Tether*
 (01) After market harness/shield/tether added, not used
 (02) After market harness/shield/tether used
 (03) Child safety seat used, but no after market harness/shield/tether added
 (09) Unknown if harness/shield/tether added or used

- Designed With Harness/Shield/Tether*
 (11) Harness/shield/tether not used
 (12) Harness/shield/tether used
 (19) Unknown if harness/shield/tether used

- Unknown If Designed With Harness/Shield/Tether*
 (21) Harness/shield/tether not used
 (22) Harness/shield/tether used
 (29) Unknown if harness/shield/tether used
- (99) Unknown if child safety seat used

INJURY CONSEQUENCES**34. Injury Severity (Police Rating)** 0

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 0

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):

(9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 0

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

(9) Unknown

37. Hospital Stay 0 0

- (00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 0 0

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
 - (61) 61 days or more
 - (62) Fatally injured
 - (97) Not working prior to accident
 - (99) Unknown

39. Time to Death 0 0

- Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
 - (96) Fatal - ruled disease
 - (99) Unknown

40. 1st Medically Reported Cause of Death 0 0**41. 2nd Medically Reported Cause of Death** 0 0**42. 3rd Medically Reported Cause of Death** 0 0

- Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
 - (97) Other result (specify):

(99) Unknown

43. Number of Recorded Injuries for This Occupant 0 0

- Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
 - (97) Injured, details unknown
 - (99) Unknown if injured

AUTOMATIC BELT SYSTEM44. Automatic (Passive) Belt System Availability/ Function 0

- (0) Not equipped/not available
 (1) 2 point automatic belts
 (2) 3 point automatic belts
 (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
 (9) Unknown

45. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
 (1) Automatic belt in use
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____

- (3) Automatic belt use unknown
 (9) Unknown

46. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
 (1) Non-motorized system
 (2) Motorized system
 (9) Unknown

47. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
 (1) Automatic belt used properly
 (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
 (4) Automatic shoulder belt worn behind back
 (5) Automatic belt worn around more than one person
 (6) Lap portion of automatic belt worn on abdomen
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____

- (8) Other improper use of automatic belt system (specify): _____
 (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
 (1) No automatic belt failure(s)
 (2) Torn webbing (stretched webbing not included)
 (3) Broken buckle or latchplate
 (4) Upper anchorage separated
 (5) Other anchorage separated (specify): _____
 (6) Broken retractor
 (7) Combination of above (specify): _____
 (8) Other automatic belt failure (specify): _____
 (9) Unknown

49. Seat Orientation (this Occupant Position) 0

- (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify): _____

- (9) Unknown

TRAUMA DATA50. Glasgow Coma Scale (GCS) Score (at Medical Facility) 00

- (00) Not injured
 (01) Injured - not treated at medical facility
 (02) No GCS Score at medical facility
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
 (97) Injured, details unknown
 (99) Unknown if injured

51. Was the Occupant Given Blood? 1

- (1) No - blood not given
 (2) Yes - blood given (specify units): _____
 (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO₃ 00

- (00) Not injured
 (01) Injured, ABGs not measured or reported
 (02-50) Code the actual value of the HCO₃
 (96) ABGs reported, HCO₃ unknown
 (97) Injured, details unknown
 (99) Unknown if injured

UPDATE CANDIDATE? NO [☒] YES []OCCUPANT INJURY FORM INCLUDED WITH INITIAL SUBMISSION? NO [] YES [☒]

*** STOP HERE ***
 IF THERE ARE NO RECORDED INJURIES
 (I.E., OA43 = 00,97,99)



OCCUPANT INJURY FORM

1. Primary Sampling Unit Number
2. Case Number - ~~Stratum~~ 92-22

3. Vehicle Number 01
4. Occupant Number 02

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

O.I.C.-A.I.S						Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.	
Source of Injury Data	Body Region	Aspect	Lesion	System Organ	A.I.S. Severity					
1st	5. <u>0</u>	6. <u>0</u>	7. <u>0</u>	8. <u>0</u>	9. <u>0</u>	10. <u>0</u>	11. <u>00</u>	12. <u>0</u>	13. <u>0</u>	14. <u>00</u>
2nd	15. <u> </u>	16. <u> </u>	17. <u> </u>	18. <u> </u>	19. <u> </u>	20. <u> </u>	21. <u> </u>	22. <u> </u>	23. <u> </u>	24. <u> </u>
3rd	25. <u> </u>	26. <u> </u>	27. <u> </u>	28. <u> </u>	29. <u> </u>	30. <u> </u>	31. <u> </u>	32. <u> </u>	33. <u> </u>	34. <u> </u>
4th	35. <u> </u>	36. <u> </u>	37. <u> </u>	38. <u> </u>	39. <u> </u>	40. <u> </u>	41. <u> </u>	42. <u> </u>	43. <u> </u>	44. <u> </u>
5th	45. <u> </u>	46. <u> </u>	47. <u> </u>	48. <u> </u>	49. <u> </u>	50. <u> </u>	51. <u> </u>	52. <u> </u>	53. <u> </u>	54. <u> </u>
6th	55. <u> </u>	56. <u> </u>	57. <u> </u>	58. <u> </u>	59. <u> </u>	60. <u> </u>	61. <u> </u>	62. <u> </u>	63. <u> </u>	64. <u> </u>
7th	65. <u> </u>	66. <u> </u>	67. <u> </u>	68. <u> </u>	69. <u> </u>	70. <u> </u>	71. <u> </u>	72. <u> </u>	73. <u> </u>	74. <u> </u>
8th	75. <u> </u>	76. <u> </u>	77. <u> </u>	78. <u> </u>	79. <u> </u>	80. <u> </u>	81. <u> </u>	82. <u> </u>	83. <u> </u>	84. <u> </u>
9th	85. <u> </u>	86. <u> </u>	87. <u> </u>	88. <u> </u>	89. <u> </u>	90. <u> </u>	91. <u> </u>	92. <u> </u>	93. <u> </u>	94. <u> </u>
10th	95. <u> </u>	96. <u> </u>	97. <u> </u>	98. <u> </u>	99. <u> </u>	100. <u> </u>	101. <u> </u>	102. <u> </u>	103. <u> </u>	104. <u> </u>

OCCUPANT INJURY DATA

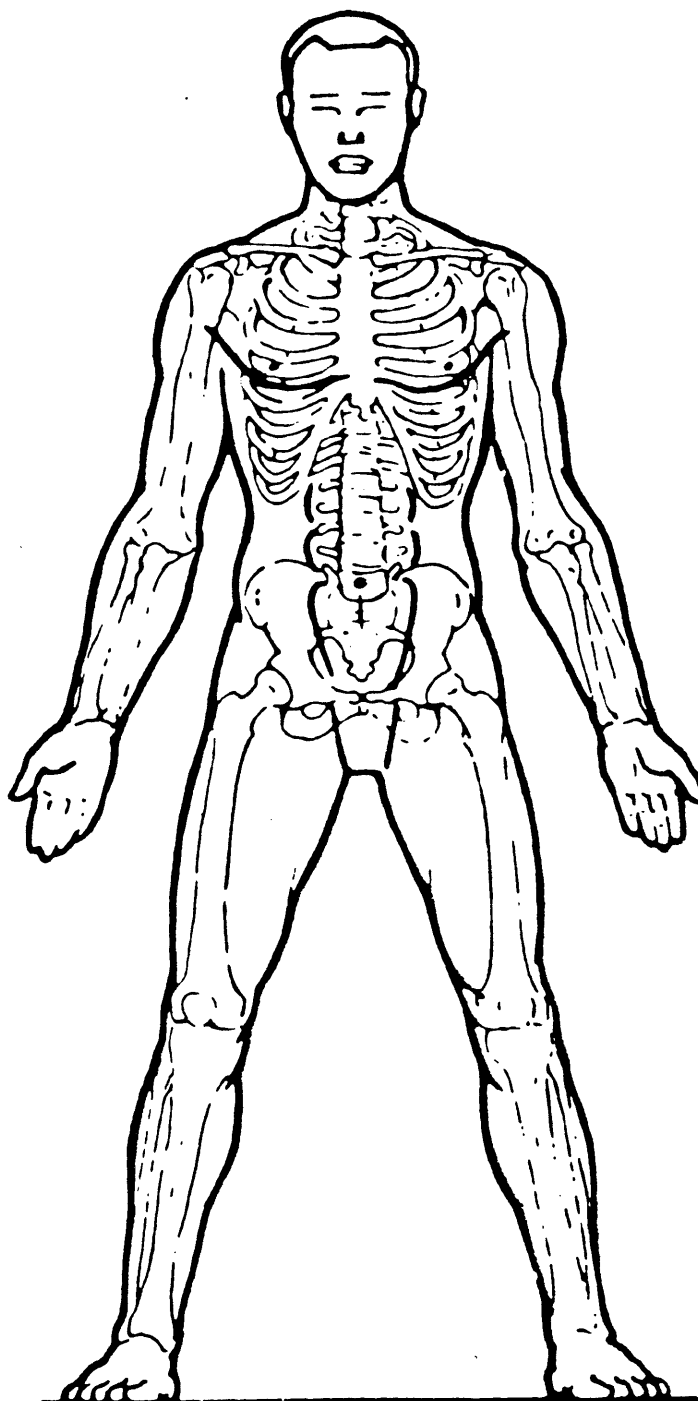
	Source of Injury Data	O.I.C.-A.I.S					Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
		Body Region	Aspect	Lesion	System Organ	A.I.S. Severity				
11th	—	—	—	—	—	—	— — —	—	—	— — —
12th	—	—	—	—	—	—	— — —	—	—	— — —
13th	—	—	—	—	—	—	— — —	—	—	— — —
14th	—	—	—	—	—	—	— — —	—	—	— — —
15th	—	—	—	—	—	—	— — —	—	—	— — —
16th	—	—	—	—	—	—	— — —	—	—	— — —
17th	—	—	—	—	—	—	— — —	—	—	— — —
18th	—	—	—	—	—	—	— — —	—	—	— — —
19th	—	—	—	—	—	—	— — —	—	—	— — —
20th	—	—	—	—	—	—	— — —	—	—	— — —
21st	—	—	—	—	—	—	— — —	—	—	— — —
22nd	—	—	—	—	—	—	— — —	—	—	— — —
23rd	—	—	—	—	—	—	— — —	—	—	— — —
24th	—	—	—	—	—	—	— — —	—	—	— — —
25th	—	—	—	—	—	—	— — —	—	—	— — —

AGE 04.....

SEX Male.....

WT. 17.1kg (381bs).....

HT. 106.7cm (42").....



NOT INJURED.

SOURCE OF INJURY DATA**OFFICIAL**

- (1) Autopsy records with or without hospital medical records
- (2) Hospital medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____
- (9) Police

INJURY SOURCE**FRONT**

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify): _____

- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail.

- (27) Other left side object (specify): _____

- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests

- (31) Right side hardware or armrest

- (32) Right A pillar

- (33) Right B pillar

- (34) Other right pillar (specify): _____

- (35) Right side window glass or frame

- (36) Right side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.

- (37) Other right side object (specify): _____

- (38) Right side window sill

INTERIOR

- (40) Seat, back support

- (41) Belt restraint webbing/buckle

- (42) Belt restraint B-pillar attachment point

- (43) Other restraint system component (specify): _____

- (44) Head restraint system

- (45) Air bag

- (46) Other occupants (specify): _____

- (47) Interior loose objects

- (48) Child safety seat (specify): _____

- (49) Other interior object (specify): _____

ROOF

- (50) Front header

- (51) Rear header

- (52) Roof left side rail

- (53) Roof right side rail

- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)

- (57) Floor or console mounted transmission lever, including console

- (58) Parking brake handle

- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.

- (62) Other rear object (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

- (65) Hood

- (66) Outside hardware (e.g., outside mirror, antenna)

- (67) Other exterior surface or tires (specify): _____

- (68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper

- (71) Hood edge

- (72) Other front of vehicle (specify): _____

- (73) Hood

- (74) Hood ornament

- (75) Windshield, roof rail, A-pillar

- (76) Side surface

- (77) Side mirrors

- (78) Other side protrusions (specify): _____

- (79) Rear surface

- (80) Undercarriage

- (81) Tires and wheels

- (82) Other exterior of other motor vehicle (specify): _____

- (83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground

- (85) Other vehicle or object (specify): _____

- (86) Unknown vehicle or object

NONCONTACT INJURY

- (90) Fire in vehicle

- (91) Flying glass

- (92) Other noncontact injury source (specify): _____

- (93) Air bag exhaust gases

- (97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION**O.I.C. Body Region**

- (M) Abdomen
- (Q) Ankle—foot
- (A) Arm (upper)
- (B) Back-thoracolumbar spine
- (C) Chest
- (E) Elbow
- (F) Face
- (R) Forearm
- (H) Head—skull
- (U) Injured, unknown region
- (K) Knee
- (L) Leg (lower)
- (Y) Lower limb(s) (whole or unknown part)
- (N) Neck—cervical spine
- (P) Pelvic—hip
- (S) Shoulder
- (T) Thigh
- (X) Upper limb(s) (whole or unknown part)
- (O) Whole body
- (W) Wrist—hand

Aspect of Injury

- (A) Anterior—front
- (B) Bilateral (rib fracture only)
- (C) Central
- (I) Inferior—lower
- (U) Injured, unknown aspect
- (L) Left
- (P) Posterior—back
- (R) Right
- (S) Superior—upper
- (W) Whole region

Lesion

- (A) Abrasion
- (M) Amputation
- (V) Avulsion
- (B) Burn
- (K) Concussion
- (C) Contusion
- (N) Crush
- (G) Detachment, separation
- (D) Dislocation

- (F) Fracture
- (Z) Fracture and dislocation
- (U) Injured, unknown lesion
- (L) Laceration
- (O) Other
- (P) Perforation, puncture
- (R) Rupture
- (S) Sprain
- (T) Strain
- (E) Total severance, transection

System/Organ

- (W) All systems in region
- (A) Arteries—veins
- (B) Brain
- (D) Digestive
- (E) Ears
- (O) Eye
- (H) Heart
- (U) Injured, unknown system
- (I) Integumentary
- (J) Joints
- (K) Kidneys

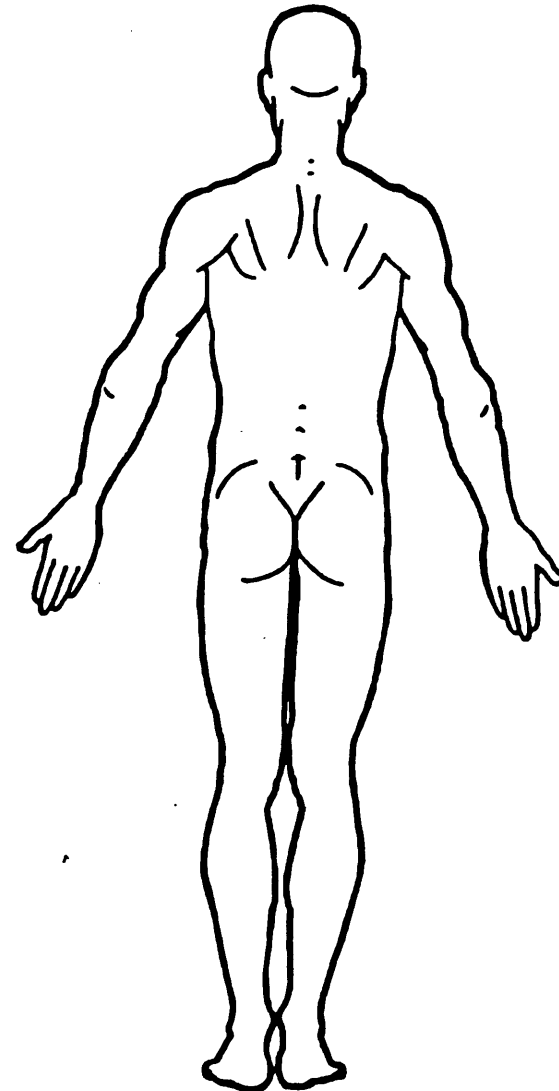
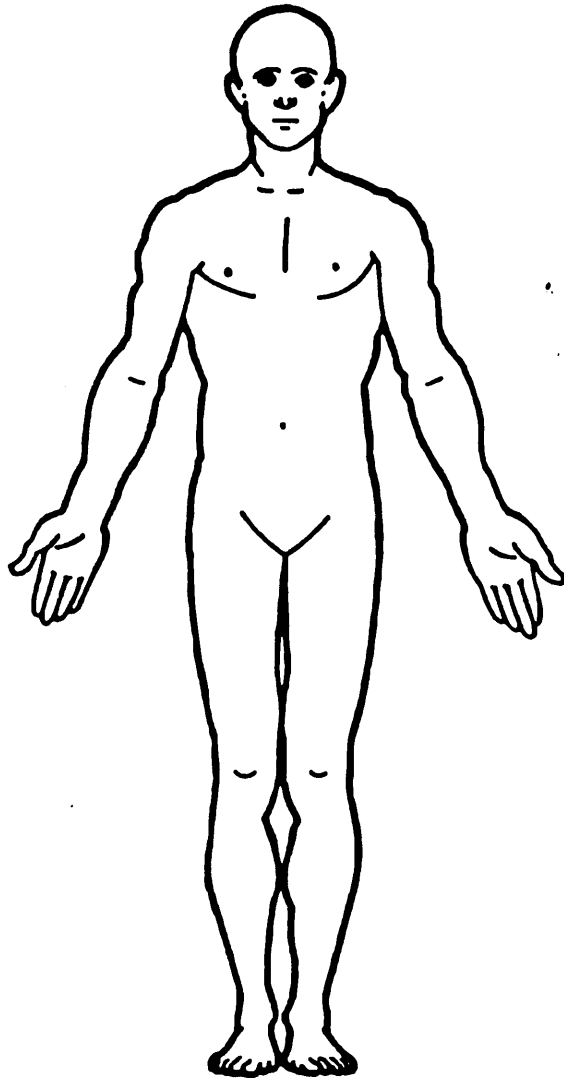
- (L) Liver
- (M) Muscles
- (N) Nervous system
- (P) Pulmonary—lungs
- (R) Respiratory
- (S) Skeletal
- (C) Spinal cord
- (Q) Spleen
- (T) Thyroid, other endocrine gland
- (V) Vertebrae

Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Lesion, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





OCCUPANT ASSESSMENT FORM

1. ~~Primary Sampling Unit Number~~ _____

2. Case Number - ~~Stratum~~ 92-22

3. Vehicle Number 01

4. Occupant Number 03

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 06

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex 2

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height 44

Code actual height to the nearest inch.

(99) Unknown

8. Occupant's Weight 050

Code actual weight to the nearest pounds.

(999) Unknown

9. Occupant's Role 2

(1) Driver

(2) Passenger

(9) Unknown

10. Occupant's Seat Position 13

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant Posture 0

(0) Normal posture

(1) Abnormal posture (specify):

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection 0

(0) No ejection

(1) Complete ejection

(2) Partial ejection

(3) Ejection, unknown degree

(9) Unknown

13. Ejection Area 0

(0) No ejection

(1) Windshield

(2) Left front

(3) Right front

(4) Left rear

(5) Right rear

(6) Rear

(7) Roof

(8) Other area (e.g., back of pickup, etc.)
(specify):

(9) Unknown

14. Ejection Medium 0

(0) No ejection

(1) Door/hatch/tailgate

(2) Nonfixed roof structure

(3) Fixed glazing

(4) Nonfixed glazing (specify):

(5) Integral structure

(8) Other medium (specify):

(9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

(0) No ejection

(1) Open

(2) Closed

(3) Integral structure

(9) Unknown

16. Entrapment 0

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

(0) Not entrapped

(1) Entrapped

(9) Unknown

RESTRAINT SYSTEM AND SEAT EVALUATION**17. Manual (Active) Belt System Availability** 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

18. Manual (Active) Belt System Use 04

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

(02) Shoulder belt _____

(03) Lap belt _____

(04) Lap and shoulder belt _____

(05) Belt used—type unknown _____

(08) Other belt used (specify): _____

(12) Shoulder belt used with child safety seat _____

(13) Lap belt used with child safety seat _____

(14) Lap and shoulder belt used with child safety seat _____

(15) Belt used with child safety seat—type unknown _____

(18) Other belt used with child safety seat (specify): _____

(99) Unknown if belt used _____

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown _____

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor _____

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown _____

21. Air Bag System Availability/Function 0

- (0) Not equipped/not available
- (1) Air bag

Non-functional

(2) Air bag disconnected (specify): _____

(3) Air bag not reinstalled _____

(9) Unknown _____

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Did Air Bag System Fail? 0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____

(9) Unknown _____

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): _____

(8) Restrained, type unknown _____

(9) Police indicated "unknown" _____

25. Head Restraint Type/Damage by Occupant at This Occupant Position 3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): _____

(9) Unknown _____

26. Seat Type (this Occupant Position) 06
- (00) Occupant not seated or no seat
 - (01) Bucket
 - (02) Bucket with folding back
 - (03) Bench
 - (04) Bench with separate back cushions
 - (05) Bench with folding back(s)
 - (06) Split bench with separate back cushions
 - (07) Split bench with folding back(s)
 - (08) Pedestal (i.e., column supported)
 - (09) Other seat type (specify): _____
 - (10) Box mounted seat (i.e., van type)
 - (99) Unknown

27. Seat Performance (this Occupant Position) 1
- (0) Occupant not seated or no seat
 - (1) No seat performance failure(s)
 - (2) Seat adjusters failed
 - (3) Seat back folding locks or "seat back" failed
 - (4) Seat track/anchors failed
 - (5) Deformed by impact of occupant
 - (6) Deformed by passenger compartment intrusion (specify): _____
 - (7) Combination of above (specify): _____
 - (8) Other (specify): _____
 - (9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 000
- (000) No child safety seat
 - Applicable codes are found in your NASS CDS Data Collection, Coding and Editing
 - (950) Built-in child safety seat
 - (997) Other make/model (specify): _____
 - (998) Unknown make/model
 - (999) Unknown if child safety seat used
29. Type of Child Safety Seat 0
- (0) No child safety seat
 - (1) Infant seat
 - (2) Toddler seat
 - (3) Convertible seat
 - (4) Booster seat
 - (7) Other type child safety seat (specify): _____
 - (8) Unknown child safety seat type
 - (9) Unknown if child safety seat used

30. Child Safety Seat Orientation 00
- (00) No child safety seat
 - Designed for Rear Facing for This Age/Weight*
 - (01) Rear facing
 - (02) Forward facing
 - (08) Other orientation (specify): _____
 - (09) Unknown orientation
 - Designed For Forward Facing for This Age/Weight*
 - (11) Rear facing
 - (12) Forward facing
 - (18) Other orientation (specify): _____
 - (19) Unknown orientation
 - Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*
 - (21) Rear facing
 - (22) Forward facing
 - (28) Other orientation (specify): _____
 - (29) Unknown orientation
 - (99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 00
32. Child Safety Seat Shield Usage 00
33. Child Safety Seat Tether Usage 00
- Note: Options below applicable to Variables OA31-OA33.
- (00) No child safety seat

- Not Designed With Harness/Shield/Tether*
- (01) After market harness/shield/tether added, not used
 - (02) After market harness/shield/tether used
 - (03) Child safety seat used, but no after market harness/shield/tether added
 - (09) Unknown if harness/shield/tether added or used

- Designed With Harness/Shield/Tether*
- (11) Harness/shield/tether not used
 - (12) Harness/shield/tether used
 - (19) Unknown if harness/shield/tether used

- Unknown If Designed With Harness/Shield/Tether*
- (21) Harness/shield/tether not used
 - (22) Harness/shield/tether used
 - (29) Unknown if harness/shield/tether used
 - (99) Unknown if child safety seat used

INJURY CONSEQUENCES**34. Injury Severity (Police Rating)**3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality0

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):

(9) Unknown**36. Type Of Medical Facility (for Initial Treatment)**0

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

(9) Unknown**37. Hospital Stay**0 0

- (00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

38. Working Days Lost0 0

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
 - (61) 61 days or more
 - (62) Fatally injured
 - (97) Not working prior to accident
 - (99) Unknown

39. Time to Death0 0

- Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
 - (96) Fatal - ruled disease
 - (99) Unknown

40. 1st Medically Reported Cause of Death0 0**41. 2nd Medically Reported Cause of Death**0 0**42. 3rd Medically Reported Cause of Death**0 0

- Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
 - (97) Other result (specify):

(99) Unknown**43. Number of Recorded Injuries for This Occupant**0 0

- Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
 - (97) Injured, details unknown
 - (99) Unknown if injured

AUTOMATIC BELT SYSTEM44. Automatic (Passive) Belt System Availability/ Function 0

- (0) Not equipped/not available
 (1) 2 point automatic belts
 (2) 3 point automatic belts
 (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
 (9) Unknown

45. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
 (1) Automatic belt in use
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
 (3) Automatic belt use unknown
 (9) Unknown

46. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
 (1) Non-motorized system
 (2) Motorized system
 (9) Unknown

47. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
 (1) Automatic belt used properly
 (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
 (4) Automatic shoulder belt worn behind back
 (5) Automatic belt worn around more than one person
 (6) Lap portion of automatic belt worn on abdomen
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):
 (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
 (1) No automatic belt failure(s)
 (2) Torn webbing (stretched webbing not included)
 (3) Broken buckle or latchplate
 (4) Upper anchorage separated
 (5) Other anchorage separated (specify):
 (6) Broken retractor
 (7) Combination of above (specify):
 (8) Other automatic belt failure (specify):
 (9) Unknown

49. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):
 (9) Unknown

TRAUMA DATA50. Glasgow Coma Scale (GCS) Score 00
(at Medical Facility)

- (00) Not injured
 (01) Injured - not treated at medical facility
 (02) No GCS Score at medical facility
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
 (97) Injured, details unknown
 (99) Unknown if injured

51. Was the Occupant Given Blood? 1

- (1) No - blood not given
 (2) Yes - blood given (specify units):
 (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO₃ 00

- (00) Not injured
 (01) Injured, ABGs not measured or reported
 (02-50) Code the actual value of the HCO₃
 (96) ABGs reported, HCO₃ unknown
 (97) Injured, details unknown
 (99) Unknown if injured

UPDATE CANDIDATE? NO ☒ YES []OCCUPANT INJURY FORM INCLUDED WITH INITIAL SUBMISSION? NO [] YES ☒

*** STOP HERE ***
 IF THERE ARE NO RECORDED INJURIES
 (I.E., OA43 = 00,97,99)



OCCUPANT INJURY FORM

1. Primary Sampling Unit Number	3. Vehicle Number
2. Case Number Stratum 92-22	4. Occupant Number
	01
	03

INJURY DATA

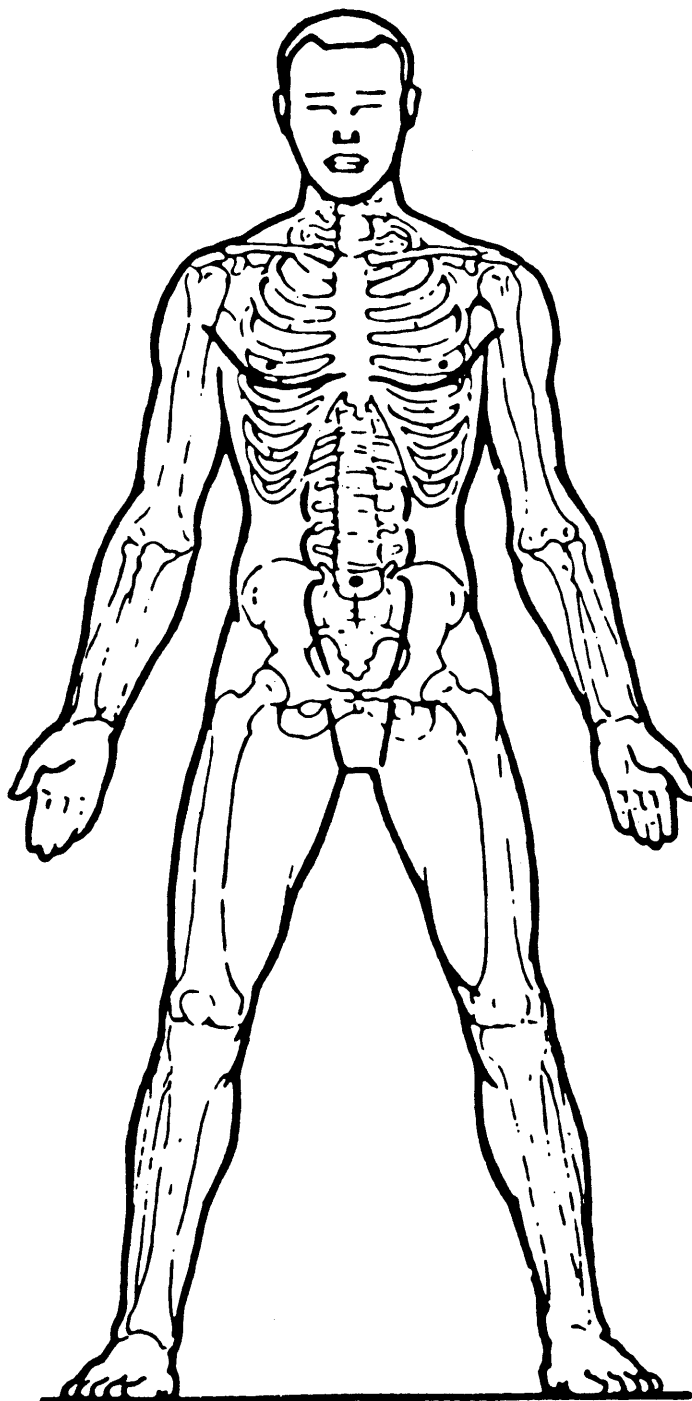
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	O.I.C.-A.I.S					Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion No.	
	Body Region	Aspect	Lesion	System Organ	A.I.S. Severity					
1st	5. 0	6. 0	7. 0	8. 0	9. 0	10. 0	11. 00	12. 0	13. 0	14. 00
2nd	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
3rd	25.	26.	27.	28.	29.	30.	31.	32.	33.	34.
4th	35.	36.	37.	38.	39.	40.	41.	42.	43.	44.
5th	45.	46.	47.	48.	49.	50.	51.	52.	53.	54.
6th	55.	56.	57.	58.	59.	60.	61.	62.	63.	64.
7th	65.	66.	67.	68.	69.	70.	71.	72.	73.	74.
8th	75.	76.	77.	78.	79.	80.	81.	82.	83.	84.
9th	85.	86.	87.	88.	89.	90.	91.	92.	93.	94.
10th	95.	96.	97.	98.	99.	100.	101.	102.	103.	104.

O.I.C.-A.I.S

	Source of Injury Date	O.I.C.-A.I.S					Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
		Body Region	Aspect	Lesion	System Organ	A.I.S. Severity				
11th	—	—	—	—	—	—	— —	—	—	— —
12th	—	—	—	—	—	—	— —	—	—	— —
13th	—	—	—	—	—	—	— —	—	—	— —
14th	—	—	—	—	—	—	— —	—	—	— —
15th	—	—	—	—	—	—	— —	—	—	— —
16th	—	—	—	—	—	—	— —	—	—	— —
17th	—	—	—	—	—	—	— —	—	—	— —
18th	—	—	—	—	—	—	— —	—	—	— —
19th	—	—	—	—	—	—	— —	—	—	— —
20th	—	—	—	—	—	—	— —	—	—	— —
21st	—	—	—	—	—	—	— —	—	—	— —
22nd	—	—	—	—	—	—	— —	—	—	— —
23rd	—	—	—	—	—	—	— —	—	—	— —
24th	—	—	—	—	—	—	— —	—	—	— —
25th	—	—	—	—	—	—	— —	—	—	— —

AGE _06_
SEX _Female_
WT. _22.5kg(50lbs)
HT. _111.8cm(44")



NOT INJURED.

SOURCE OF INJURY DATA**OFFICIAL**

- (1) Autopsy records with or without hospital medical records
- (2) Hospital medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____
- (9) Police

INJURY SOURCE**FRONT**

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify): _____
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): _____
- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify): _____
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (37) Other right side object (specify): _____

- (38) Right side window sill

INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air bag
- (46) Other occupants (specify): _____
- (47) Interior loose objects
- (48) Child safety seat (specify): _____
- (49) Other interior object (specify): _____

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): _____
- (68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): _____
- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): _____
- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): _____
- (83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): _____
- (86) Unknown vehicle or object

NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): _____
- (93) Air bag exhaust gases
- (97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION**O.I.C. Body Region**

- (M) Abdomen
- (Q) Ankle-foot
- (A) Arm (upper)
- (B) Back-thoracolumbar spine
- (C) Chest
- (E) Elbow
- (F) Face
- (R) Forearm
- (H) Head-skull
- (U) Injured, unknown region
- (K) Knee
- (L) Leg (lower)
- (Y) Lower limbs(s) (whole or unknown part)
- (N) Neck-cervical spine
- (P) Pelvic-hip
- (S) Shoulder
- (T) Thigh
- (X) Upper limb(s) (whole or unknown part)
- (O) Whole body
- (W) Wrist-hand

Aspect of Injury

- (A) Anterior-front
- (B) Bilateral (rib fracture only)
- (C) Central
- (I) Inferior-lower
- (U) Injured, unknown aspect
- (L) Left
- (P) Posterior-back
- (R) Right
- (S) Superior-upper
- (W) Whole region

Lesion

- (A) Abrasion
- (M) Amputation
- (V) Avulsion
- (B) Burn
- (K) Concussion
- (C) Contusion
- (N) Crush
- (G) Detachment, separation
- (D) Dislocation

- (F) Fracture
- (Z) Fracture and dislocation
- (U) Injured, unknown lesion
- (L) Laceration
- (O) Other
- (P) Perforation, puncture
- (R) Rupture
- (S) Sprain
- (T) Strain
- (E) Total severance, transection

System/Organ

- (W) All systems in region
- (A) Arteries-veins
- (B) Brain
- (D) Digestive
- (E) Ears
- (O) Eye
- (H) Heart
- (U) Injured, unknown system
- (I) Integumentary
- (J) Joints
- (K) Kidneys

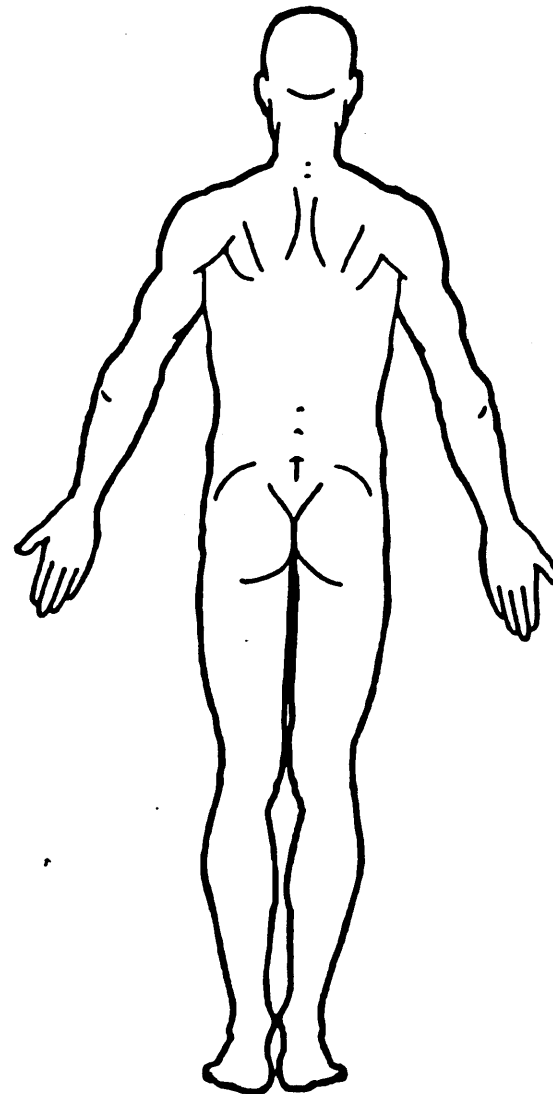
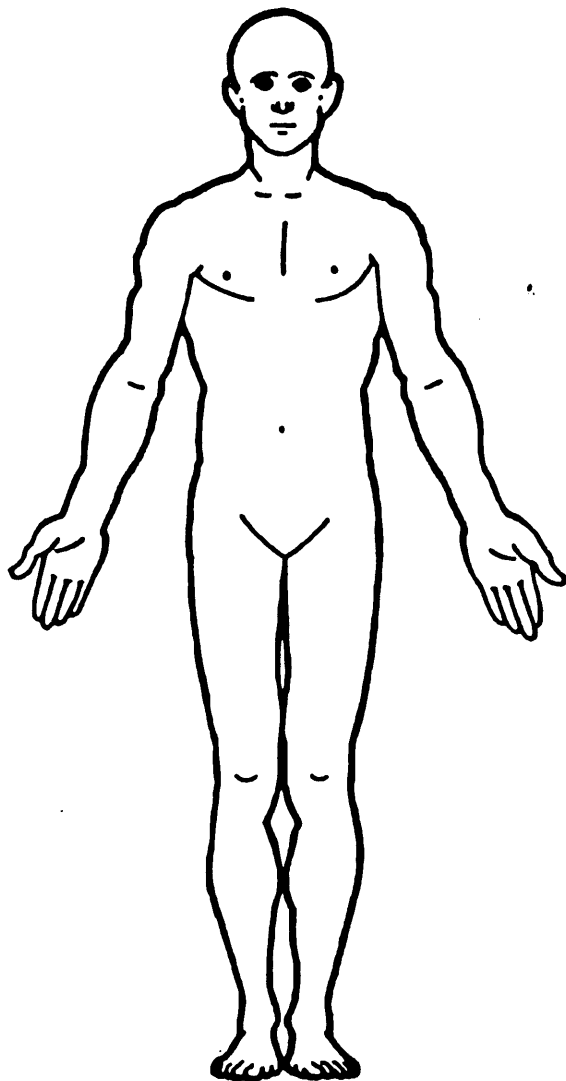
- (L) Liver
- (M) Muscles
- (N) Nervous system
- (P) Pulmonary-lungs
- (R) Respiratory
- (S) Skeletal
- (C) Spinal cord
- (Q) Spleen
- (T) Thyroid, other endocrine gland
- (V) Vertebrae

Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Lesion, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



APPENDIX F

NASS Vehicle Forms

(Vehicle #2)



GENERAL VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

VEHICLE IDENTIFICATION

4. Vehicle Model Year

Code the last two digits of the model year
(99) Unknown

5. Vehicle Make (specify):

CHEVROLET
Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown

6. Vehicle Model (specify):

NOVA
Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(999) Unknown

7. Body Type

Note: Applicable codes may be found on
the back of this page.

8. Vehicle Identification Number

1X27D7W

Left justify; Slash zeros and letter Z (0 and Z)
No VIN—Code all zeros
Unknown—Code all nine's

OFFICIAL RECORDS

9. Police Reported Vehicle Disposition

(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

10. Police Reported Travel Speed

Code to the nearest mph (NOTE: 00 means
less than 0.5 mph)
(97) 96.5 mph and above
(99) Unknown

11. Police Reported Alcohol Presence

(0) No alcohol present
(1) Yes (alcohol present)
(7) Not reported
(8) No driver present
(9) Unknown

Note: See variables 37 through 55
(Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver

Code actual value (decimal implied
before first digit—0.xx)
(95) Test refused
(96) None given
(97) AC test performed, results unknown
(98) No driver present
(99) Unknown

Source: _____

ACCIDENT RELATED

13. Speed Limit

(00) No statutory limit
Code posted or statutory speed limit
(99) Unknown

14. Attempted Avoidance Maneuver

(00) No impact
(01) No avoidance actions
(02) Braking (no lockup)
(03) Braking (lockup)
(04) Braking (lockup unknown)
(05) Releasing brakes
(06) Steering left
(07) Steering right
(08) Braking and steering left
(09) Braking and steering right
(10) Accelerating
(11) Accelerating and steering left
(12) Accelerating and steering right
(97) No driver present
(98) Other action (specify):

(99) Unknown

15. Accident Type

Applicable codes may be found on the
back of page two of this field form
(00) No impact
Code the number of the diagram that
best describes the accident circumstance
(98) Other accident type (specify):

(99) Unknown

**** SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 ****

CODES FOR BODY TYPE

CDS APPLICABLE VEHICLES

Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify):

(09) Unknown automobile type

Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

Utility Vehicles ($\leq 10,000$ lbs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravado, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

Van Based Light Trucks ($\leq 10,000$ lbs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Mitsubishi Minivan, Vanagon/Camper.)
 - (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
 - (22) Step van or walk-in van ($\leq 10,000$ lbs GVWR)
 - (23) Van based motorhome ($\leq 10,000$ lbs GVWR)
 - (28) Other van type (Hi-Cube Van, Kary) (specify):
-
- (29) Unknown van type

Light Conventional Trucks (Pickup style cab, $\leq 10,000$ lbs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500.)
- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

Other Light Trucks ($\leq 10,000$ lbs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
 - (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify):
-
- (59) Unknown bus type

Medium/Heavy Trucks ($> 10,000$ lbs GVWR)

- (60) Step van ($> 10,000$ lbs GVWR)
- (61) Single unit straight truck ($10,000$ lbs $<$ GVWR $\leq 19,500$ lbs)
- (62) Single unit straight truck ($19,500$ lbs $<$ GVWR $\leq 26,000$ lbs)
- (63) Single unit straight truck ($> 26,000$ lbs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
 - (81) Moped (motorized bicycle)
 - (82) Three-wheel motorcycle or moped
 - (88) Other motored cycle (minibike, motorscooter) (specify):
-
- (89) Unknown motored cycle type

Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

OCCUPANT RELATED16. Driver Presence in Vehicle 1

- (0) Driver not present
(1) Driver present
(9) Unknown

17. Number of Occupants This Vehicle 01

- (00-96) Code actual number of occupants for this vehicle
(97) 97 or more
(99) Unknown

18. Number of Occupant Forms Submitted 01**VEHICLE WEIGHT ITEMS**19. Vehicle Curb Weight 03,300

- 3284 Code weight to nearest 100 pounds.
(010) Less than 1050 pounds
(135) 13,500 pounds or more
(999) Unknown

Source: 20. Vehicle Cargo Weight 0000

- Code weight to nearest 100 pounds.
(00) Less than 50 pounds
(97) 9,650 pounds or more
(99) Unknown

RECONSTRUCTION DATA21. Towed Trailing Unit 0

- (0) No towed unit
(1) Yes—towed trailing unit
(9) Unknown

22. Documentation of Trajectory Data 0

- for This Vehicle
(0) No
(1) Yes

23. Post Collision Condition of Tree or Pole 0

- (For Highest Delta V)
(0) Not collision (for highest delta V) with tree or pole
(1) Not damaged
(2) Cracked/sheared
(3) Tilted <45 degrees
(4) Tilted ≥45 degrees
(5) Uprooted tree
(6) Separated pole from base
(7) Pole replaced
(8) Other (specify):
(9) Unknown

24. Rollover 0

- (0) No rollover (no overturning)

Rollover (primarily about the longitudinal axis)

- (1) Rollover, 1 quarter turn only
(2) Rollover, 2 quarter turns
(3) Rollover, 3 quarter turns
(4) Rollover, 4 or more quarter turns (specify):

- (5) Rollover--end-over-end (i.e., primarily about the lateral axis)
(9) Rollover (overturn), details unknown

OVERRIDE/UNDERRIDE (THIS VEHICLE)25. Front Override/Underride (this Vehicle) 026. Rear Override/Underride (this Vehicle) 0

- (0) No override/underride, or not an end-to-end impact

Override (see specific CDC)

- (1) 1st CDC
(2) 2nd CDC
(3) Other not automated CDC (specify):

Underride (see specific CDC)

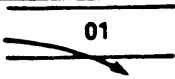
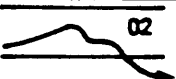
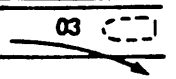
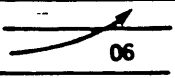
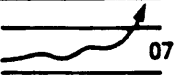
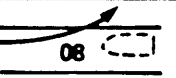
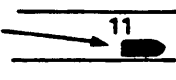
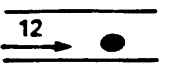
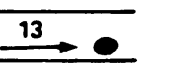
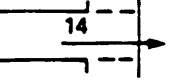
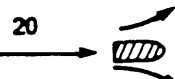
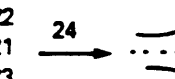
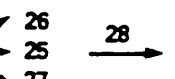
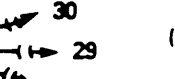
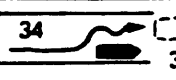
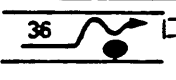
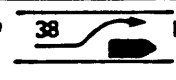
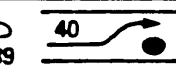
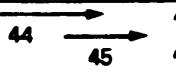
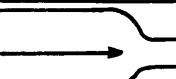


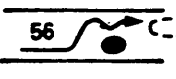

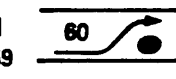

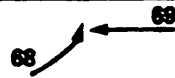

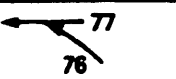
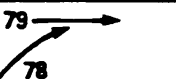
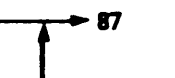

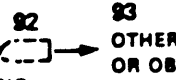

- (4) 1st CDC
(5) 2nd CDC
(6) Other not automated CDC (specify):

- (7) Medium/heavy truck or bus override
(9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
(997) Noncollision
(998) Impact with object
(999) Unknown

27. Heading Angle For This Vehicle 03228. Heading Angle For Other Vehicle 284

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I. Single Driver	A. Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	06 SPECIFICS UNKNOWN
	B. Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C. Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II. Same Trafficway Same Direction	D. Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 25, 26, 27	 24 DECEL. 28, 29, 30, 31	 26 AVOID COLLISION WITH VEH.	(EACH • 32) SPECIFICS OTHER (EACH • 33) SPECIFICS UNKNOWN
	E. Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER (EACH • 43) SPECIFICS UNKNOWN
	F. Sideswipe Angle	 44 45	 46 45 47	(EACH • 48) SPECIFICS OTHER	(EACH • 49) SPECIFICS UNKNOWN	
III. Same Trafficway Opposite Direction	G. Head-On	 50 LATERAL MOVE	(EACH • 52) SPECIFICS OTHER	(EACH • 53) SPECIFICS UNKNOWN		
	H. Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	(EACH • 62) SPECIFICS OTHER (EACH • 63) SPECIFICS UNKNOWN
	I. Sideswipe Angle	 64 LATERAL MOVE	(EACH • 66) SPECIFICS OTHER	(EACH • 67) SPECIFICS UNKNOWN		
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 70 INITIAL SAME DIRECTIONS	(EACH • 74) SPECIFICS OTHER (EACH • 75) SPECIFICS UNKNOWN		
	K. Turn Into Path	 77 TURN INTO SAME DIRECTION	 79 TURN INTO OPPOSITE DIRECTIONS	(EACH • 84) SPECIFICS OTHER (EACH • 85) SPECIFICS UNKNOWN		
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	 86 87	 88 89	(EACH • 90) SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN	
VI. Miscellaneous	M. Backing Etc.	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

29. Basis for Total Delta V (highest) 1*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

Delta V Not Calculated

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

COMPUTER GENERATED DELTA V

30. Total Delta V

Secondary Highest

18 Nearest mph

(NOTE: 00 means less than
0.5 mph)
(97) 96.5 mph and above
(99) Unknown

31. Longitudinal Component of
Delta V+
0 17 Nearest mph

(NOTE: 00 means greater than
-0.5 and less than +0.5 mph)
(± 97) ± 96.5 mph and above
(99) Unknown

Secondary Highest

32. Lateral Component of Delta V

+
0 0 6 Nearest mph

(NOTE: 00 means greater than
-0.5 and less than +0.5 mph)
(± 97) ± 96.5 mph and above
(99) Unknown

33. Energy Absorption

0 3 6 . 8 0 036819 Nearest 100 foot-lbs

(NOTE: 0000 means less than 50 foot-lbs)
(9997) 999,650 foot-lbs or more
(9999) Unknown

34. Confidence In Reconstruction Program
Results (For Highest Delta V)

- (0) No reconstruction 1
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

35. Type of Vehicle Inspection

- (0) No inspection 1
- (1) Complete inspection
- (2) Partial inspection (specify):

36. Is this an AOPS Vehicle?

- (0) No 0
- (1) Yes

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [] YES [✓] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [] YES [] NO

37. Police Reported Other Drug Presence 0

- (0) No other drugs present
- (1) Yes (other drug present)
- (7) Not reported
- (8) No driver present
- (9) Unknown

38. Police Reported Observation/Perception Test Type For Driver 0

- (0) No observation/perception test given
- (1) Drug recognition technician (DRT) determination using DEC process
- (2) Behavioral
- (3) Other physical observation/perception determination (specify): _____

- (4) DEC process available, unknown if determination made
- (5) DEC process not available, unknown if other observation/perception test given
- (7) Other observation/perception test (specify): _____
- (8) No driver present

39. Other Drug Specimen Test Type For Driver 0

- (0) No specimen test given
- (1) Blood test
- (2) Urine test
- (3) Other specimen tests (specify): _____
- (7) Unspecified specimen test
- (8) No driver present
- (9) Unknown if specimen test given

DRUG EVALUATION CLASSIFICATION
OTHER DRUGS TEST RESULTS FOR DRIVER

	DEC	
	Observation/ Perception Test Results	Specimen Test Results
Narcotic Drug	40. <u>0</u>	41. <u>0</u>
Depressant Drug	42. <u>0</u>	43. <u>0</u>
Stimulant Drug	44. <u>0</u>	45. <u>0</u>
Hallucinogen Drug	46. <u>0</u>	47. <u>0</u>
Cannabinoid Drug	48. <u>0</u>	49. <u>0</u>
Phencyclidine (PCP)	50. <u>0</u>	51. <u>0</u>
Inhalant Drug	52. <u>0</u>	53. <u>0</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>0</u>	55. <u>0</u>

Codes For Observation/Perception Test Results

- (0) No DEC observation/perception test given
- (1) Passed DEC observation/perception test
- (2) Failed DEC observation/perception test
- (3) DEC observation/perception test given—
results unknown
- (8) No driver present
- (9) Unknown if DEC observation/perception
test given

Codes for Specimen Test Results

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or
not obtained
- (8) No driver present
- (9) Unknown if specimen test given

OTHER DATA**56. Driver's Zip Code**

- (00000) Driver not present
 (00001) Driver not a resident of U.S. or territories
 Code actual 5-digit zip code
 (99999) Unknown

57. Driver's Race/Ethnic Origin 1

- (0) Driver not present
 (1) White (non-Hispanic)
 (2) Black (non-Hispanic)
 (3) White (Hispanic)
 (4) Black (Hispanic)
 (5) American Indian, Eskimo or Aleut
 (6) Asian or Pacific Islander
 (8) Other (specify):
 (9) Unknown

58. Vehicle Special Use (This Trip) 0

- (0) No special use
 (1) Taxi
 (2) Vehicle used as school bus
 (3) Vehicle used as other bus
 (4) Military
 (5) Police
 (6) Ambulance
 (7) Hearse
 (8) Fire truck or car
 (9) Unknown

ROLLOVER DATA

If GV07 (Body Type) \neq 1-49, leave GV59-GV63 blank.
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.
 If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type 0

- (0) No rollover
 (1) Trip-over
 (2) Flip-over
 (3) Turn-over
 (4) Climb-over
 (5) Fall-over
 (6) Bounce-over
 (7) Collision with another vehicle
 (8) Other rollover initiation type (specify):
 (9) Unknown rollover initiation type

60. Location of Rollover Initiation 0

- (0) No rollover
 (1) On roadway
 (2) On shoulder—paved
 (3) On shoulder—unpaved
 (4) On roadside or divided trafficway median
 (9) Unknown

61. Rollover Initiation Object Contacted 0 0 **62. Location on Vehicle Where Initial Principal Tripping Force Is Applied** 0

- (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify):
 (8) Non-contact rollover forces (specify):
 (9) Unknown

63. Direction of Initial Roll 0

- (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (5) End-over-end (i.e., primarily about the lateral axis)
 (9) Unknown roll direction

PRECRASH DATA**64. Pre-Event Movement (Prior to Recognition of Critical Event)** 0 1

- (01) Going straight
 (02) Slowing or stopping in traffic lane
 (03) Starting in traffic lane
 (04) Stopped in traffic lane
 (05) Passing or overtaking another vehicle
 (06) Disabled or parked in travel lane
 (07) Leaving a parking position
 (08) Entering a parking position
 (09) Turning right
 (10) Turning left
 (11) Making a U-turn
 (12) Backing up (other than for parking position)
 (13) Negotiating a curve
 (14) Changing lanes
 (15) Merging
 (16) Successful avoidance maneuver to a previous critical event
 (97) Other (specify):
 (98) No driver present
 (99) Unknown

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

Noncollision

- (31) Turn-over — fall-over
- (33) Jackknife

Collision With Fixed Object

- (41) Tree (\leq 4 inches in diameter)
- (42) Tree ($>$ 4 inches in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (\leq 4 inches in diameter)
- (51) Pole or post ($>$ 4 inches but \leq 12 inches in diameter)
- (52) Pole or post ($>$ 12 inches in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)
(specify): _____

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____

- (69) Unknown fixed object _____

Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (88) Other nonfixed object (specify): _____

- (89) Unknown nonfixed object _____

- (98) Other event (specify): _____

- (99) Unknown event or object _____

PRECRASH DATA (Continued)**65. Critical Precrash Event**67*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): _____
- (09) Unknown cause of control loss

This Vehicle Traveling

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

Other Motor Vehicle In Lane

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

Other Motor Vehicle Encroaching Into Lane

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

Pedestrian or Pedalcyclist, or Other Nonmotorist

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian - unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

Object or Animal

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location

(98) Other critical precrash event (specify): _____

(99) Unknown

For Corrective Actions Attempted see variable GV14 (Attempted Avoidance Maneuver)

66. Precrash Stability After Avoidance Maneuver1

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): _____
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action)1

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), ***
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM**

Administration	
1. Primary Sampling Unit Number	3. Vehicle Number
2. Case Number - Stratum	

VEHICLE IDENTIFICATION

VIN 1X27DZW _____ Model Year 77

Vehicle Make (specify): CHEVROLET Vehicle Model (specify): NOVA

LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	FULL BUMPER WIDTH	FULL BUMPER WIDTH
2	(R) SIDE SURFACE, STARTS 8" FORWARD OF RE AXLE, EXTENDS 114.75' REARWARD	SAME AS DIRECT

CRUSH PROFILE

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

[illegible]

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE a. Rotation physically restricted b. Tire deflated RF <u>2</u> RF <u>2</u> LF <u>2</u> LF <u>2</u> RR <u>2</u> RR <u>2</u> LR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		ORIGINAL SPECIFICATIONS Wheelbase <u>111.0</u> Overall Length <u>196.7</u> Maximum Width <u>72.2</u> Curb Weight <u>3284</u> Average Track <u>60.15</u> Front Overhang _____ Rear Overhang _____ Engine Size: cyl./displ. <u>6/250 CID</u> Undeformed End Width _____		WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only) RF ± _____ ° LF ± _____ ° RR ± _____ ° LR ± _____ ° Within ± 5 degrees
TYPE OF TRANSMISSION <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic		DRIVE WHEELS <input type="checkbox"/> FWD <input checked="" type="checkbox"/> RWD <input type="checkbox"/> 4WD		
		Approximate Cargo Weight <u>N/A</u>		

Front view sketches showing original bumper height and post-crash dimensions. Original bumper height is indicated by a double-headed arrow. Post-crash dimensions include bumper corner 24.0" and stringline 33.0".

Side view sketches showing post-crash dimensions. Post-crash dimensions include bumper corner 50.5", stringline 110.75", and bumper corner 13.5".

Rear view sketch showing post-crash dimensions. Post-crash dimensions include bumper corner 50.5", stringline 110.75", and bumper corner 13.5".

Notes: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page. Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision

(31) Overturn — rollover

(32) Fire or explosion

(33) Jackknife

(34) Other intraunit damage (specify):

(35) Noncollision injury

(38) Other noncollision (specify):

(39) Noncollision — details unknown

Collision With Fixed Object

(41) Tree (≤ 4 inches in diameter)(42) Tree (> 4 inches in diameter)

(43) Shrubbery or bush

(44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

(50) Pole or post (≤ 4 inches in diameter)(51) Pole or post (> 4 inches but ≤ 12 inches in diameter)(52) Pole or post (> 12 inches in diameter)

(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail)
(specify):

(57) Fence

(58) Wall

(59) Building

(60) Ditch or culvert

(61) Ground

(62) Fire hydrant

(63) Curb

(64) Bridge

(68) Other fixed object (specify):

(69) Unknown fixed object

Collision with Nonfixed Object

(71) Motor vehicle not in-transport

(72) Pedestrian

(73) Cyclist or cycle

(74) Other nonmotorist or conveyance

(75) Vehicle occupant

(76) Animal

(77) Train

(78) Trailer, disconnected in transport

(88) Other nonfixed object (specify):

(89) Unknown nonfixed object

(98) Other event (specify):

(99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01	01	030	00	F	D	E	W	02
02	01	090	00	R	Y	E	W	01
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>01</u>	6. <u>01</u>	7. <u>F</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>02</u>

Second Highest Delta "V"

12. <u>02</u>	13. <u>01</u>	14. <u>03</u>	15. <u>R</u>	16. <u>Y</u>	17. <u>E</u>	18. <u>W</u>	19. <u>01</u>
---------------	---------------	---------------	--------------	--------------	--------------	--------------	---------------

CRUSH PROFILE

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN INCHES.)

HIGHEST DELTA "V"

20. L	21. C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	22. ± D
<u>067</u>	<u>03</u>	<u>04</u>	<u>06</u>	<u>09</u>	<u>11</u>	<u>15</u>	<u>⊕</u> <u>-000</u>

Second Highest Delta "V"

23. L	24. C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	25. ± D
<u>115</u>	<u>00</u>	<u>00</u>	<u>00</u>	<u>01</u>	<u>00</u>	<u>00</u>	<u>⊕</u> <u>-006</u>

26. Are CDCs Documented but Not Coded on The Automated File?
(0) No
(1) Yes

0

27. Researcher's Assessment of Vehicle Disposition
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

1

28. Original Wheelbase
111.0 Code to the nearest tenth of an inch
(9999) Unknown

111.0

29. Is This A Multi-Stage Manufactured Vehicle
And/Or A Certified Altered Vehicle?

0

- (0) No post manufacturer modifications
(1) Yes - post manufacturer modifications
(specify): _____

(Include photograph of CERTIFICATION
PLACARD in case report)

(9) Unknown if vehicle is modified

30. Fire Occurrence

D

(0) No fire

Yes, fire occurred

- (1) Minor
(2) Major
(9) Unknown

31. Origin of Fire

0

- (0) No fire
(1) Vehicle exterior (front, side, back, top)
(2) Exhaust system
(3) Fuel tank (and other fuel retention
system parts)
(4) Engine compartment
(5) Cargo/trunk compartment
(6) Instrument panel
(7) Passenger compartment area
(8) Other location (specify): _____

(9) Unknown

32. Type of Fuel Tank

1

- (0) No fuel tank (electrical vehicle)
(1) Metallic
(2) Non-metallic
(9) Unknown

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS ***
(I.E., GV09 = 0 OR 9 AND GV36 = 0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



INTERIOR VEHICLE FORM

BEST AVAILABLE COPY

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

GLAZING

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

INTEGRITY

4. Passenger Compartment Integrity

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 0 8. RR 0 9. TG/H 0

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch
Opening in Collision. If IV05-IV09 \neq 2, Then code 010. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail,
etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

Glazing Damage from Impact Forces

15. WS 2 16. LF 0 17. RF 0 18. LR 0 19. RR 020. BL 0 21. Roof 8 22. Other 8

(0) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from
impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(8) No glazing

(9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 2 24. LF 0 25. RF 0 26. LR 0 27. RR 028. BL 0 29. Roof 0 30. Other 0

(0) No occupant contact to glazing or no glazing

(1) Glazing contacted by occupant but no glazing damage

(2) Glazing in place and cracked by occupant contact

(3) Glazing in place and holed by occupant contact

(4) Glazing out-of-place (cracked or not) by occupant
contact and not holed by occupant contact(5) Glazing out-of-place by occupant contact and holed by
occupant contact

(6) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

If No Glazing Damage **And** No Occupant Contact or No
Glazing, Then Code IV31 Through IV46 As 0

Type of Window/Windshield Glazing

31. WS 1 32. LF 2 33. RF 2 34. LR 2 35. RR 236. BL 2 37. Roof 0 38. Other 0

(0) No glazing contact and no damage, or no glazing

(1) AS-1 — Laminated

(2) AS-2 — Tempered

(3) AS-3 — Tempered-tinted

(4) AS-14 — Glass/Plastic

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

39. WS 1 40. LF 4 41. RF 2 42. LR 1 43. RR 144. BL 1 45. Roof 0 46. Other 0

(0) No glazing contact and no damage, or no glazing

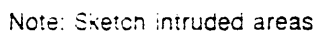
(1) Fixed

(2) Closed

(3) Partially opened

(4) Fully opened

(9) Unknown

Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

INTRUDING COMPONENT

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. _____	48. _____	49. _____	50. _____
2nd	51. _____	52. _____	53. _____	54. _____
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify): _____

NO INTRUSIONS

- (27) Side panel - forward of the A-pillar
- (28) Side panel - rear of the A-pillar

Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

LOCATION OF INTRUSION

Front Seat
(11) Left
(12) Middle
(13) Right

Fourth Seat
(41) Left
(42) Middle
(43) Right

Second Seat
(21) Left
(22) Middle
(23) Right

(97) Catastrophic
(98) Other enclosed area (specify) _____

(99) Unknown

Third Seat
(31) Left
(32) Middle
(33) Right

MAGNITUDE OF INTRUSION

- (1) ≥ 1 inch but < 3 inches
- (2) ≥ 3 inches but < 6 inches
- (3) ≥ 6 inches but < 12 inches
- (4) ≥ 12 inches but < 18 inches
- (5) ≥ 18 inches but < 24 inches
- (6) ≥ 24 inches
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING COLUMN

87. Steering Column Type

- (1) Fixed column
 (2) Tilt column
 (3) Telescoping column
 (4) Tilt and telescoping column
 (8) Other column type (specify):

(9) Unknown

DOORS LOCKED, NO KEYS

88. Blank

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-91 CDS.

X X

89. Blank

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-91 CDS.

X X X

90. Blank

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-91 CDS.

X X X

91. Blank

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-91 CDS.

X X X

92. Steering Rim/Spoke Deformation

Code actual measured

deformation to the nearest inch.

(0) No steering rim deformation

(1-5) Actual measured value

(6) 6 inches or more

(8) Observed deformation cannot be measured

(9) Unknown

3

93. Location of Steering Rim/Spoke Deformation

(00) No steering rim deformation

0 8**Quarter Sections**

(01) Section A

(02) Section B

(03) Section C

(04) Section D

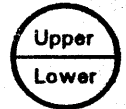
**Half Sections**

(05) Upper half of rim/spoke

(06) Lower half of rim/spoke

(07) Left half of rim/spoke

(08) Right half of rim/spoke



(09) Complete steering wheel collapse

(10) Undetermined location

(99) Unknown

INSTRUMENT PANEL

94. Odometer Reading

9 9 9 , 000

_____ miles—Code mileage to the
 nearest 1,000 miles

(000) No odometer

(001) Less than 1,500 miles

(300) 299,500 miles or more

(999) Unknown

Source: _____

95. Instrument Panel Damage from Occupant Contact?

(0) No

(1) Yes

(9) Unknown

0

96. Knee Bolsters Deformed from Occupant Contact?

(0) No

(1) Yes

(8) Not present

(9) Unknown

8

97. Did Glove Compartment Door Open During Collision(s)?

(0) No

(1) Yes

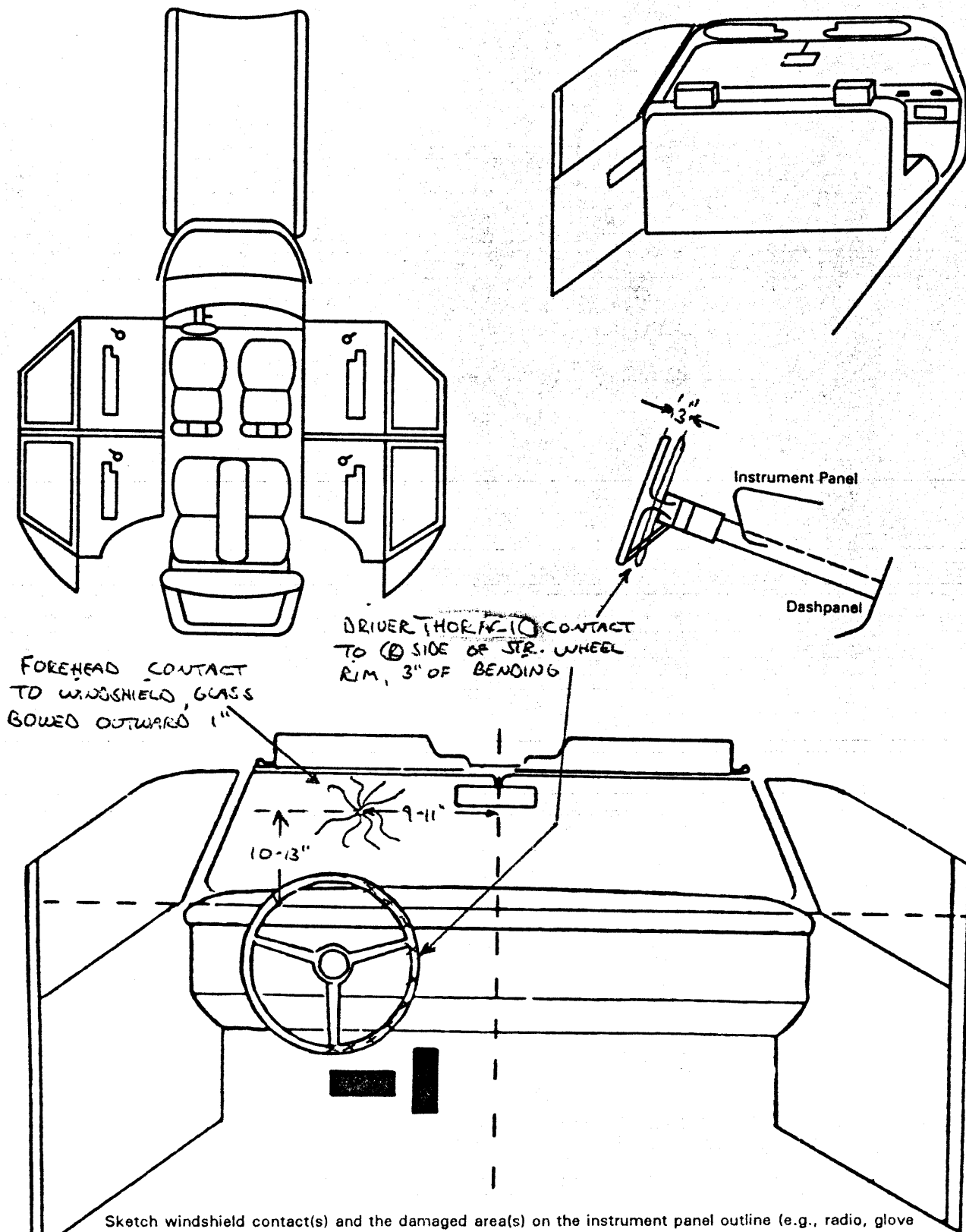
(8) Not present

(9) Unknown

0

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT					
Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	01	1	FOREHEAD	CRACKED BOWED OUTWARD 1"	1
B	04	1	CHEST	3" OF RIM DEFORMATION	1
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify):

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify):
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (27) Other left side object (specify):

- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify):
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (37) Other right side object (specify):
- (38) Right side window sill

INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify):
- (44) Head restraint system
- (45) Air bag
- (46) Other occupants (specify):
- (47) Interior loose objects

- (48) Child safety seat (specify):

- (49) Other interior object (specify):

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify):

CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number		NOT	APPLICABLE			
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):
- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

- 5. Child Safety Seat Tether Usage**
 Note: Options Below Are Used for Variables 3-5.
 (00) No child safety seat

Not Designed with Harness/Shield/Tether
 (01) After market harness/shield/tether added, not used

- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether
 (11) Harness/shield/tether not used
 (12) Harness/shield/tether used
 (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether
 (21) Harness/shield/tether not used
 (22) Harness/shield/tether used
 (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model
 (Specify make/model and occupant number)

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	3	4
	Use	00	-	-
	Failure Modes	0	-	-
SECOND	Availability	3	3	3
	Use	-	-	-
	Failure Modes	-	-	-
THIRD	Availability	X		
	Use			
	Failure Modes			
OTHER	Availability			
	Use			
	Failure Modes			

Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): _____
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown

(08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other manual belt failure (specify): _____
- (9) Unknown _____

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Left	Right
F I R S T	Availability/Function	○	○
	Deployment	○	○
	Failure	○	○

Air Bag System Availability/Function

- (0) Not equipped/not available
(1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled
(9) Unknown

Air Bag System Deployment

- (0) Not equipped/not available
(1) Air bag deployed during accident (as a result of impact)
(2) Air bag deployed inadvertently just prior to accident
(3) Air bag deployed, accident sequence undetermined
(4) Nondeployed
(5) Unknown if deployed
(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(9) Unknown

Did Air Bag System Fail?

- (0) Not equipped/not available
(1) No
(2) Yes (specify):

(9) Unknown

AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	○	○
	Use	○	○
	Type	○	○
	Proper Use	○	○
	Failure Modes	○	○

Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
(9) Unknown

Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)
(3) Automatic belt use unknown
(9) Unknown

Automatic (Passive) Belt System Type

- (0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of automatic belt system (specify):

(9) Unknown

Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify):

(6) Broken retractor
(7) Combination of above (specify):

(8) Other automatic belt failure (specify):

(9) Unknown

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3	0	3
	Seat Type	05	05	05
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
SECOND	Head Restraint Type/Damage	0	0	0
	Seat Type	03	03	03
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify: _____

(9) Unknown

Seat Type (this Occupant Position)

- (00) No seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____

(10) Box mounted seat (i.e., van type)

(99) Unknown

Seat Performance (this Occupant Position)

- (0) No seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify: _____
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____

(7) Combination of above (specify): _____

(8) Other (specify): _____

(9) Unknown

Seat Orientation (this Occupant Position)

- (0) No seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____

(9) Unknown

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [☒] Yes []

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection

- (1) Complete ejection
(1) Partial ejection
(3) Ejection, Unknown degree
(9) Unknown

Ejection Area

- (1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear

(7) Roof

- (8) Other area (e.g., back of pickup, etc.) (specify):

- (9) Unknown

Ejection Medium

- (1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify):

(5) Integral structure

- (8) Other medium (specify):

- (9) Unknown

Medium Status (Immediately Prior to Impact)

- (1) Open
(2) Closed
(3) Integral structure
(9) Unknown

ENTRAPMENT No [☒] Yes []

Describe entrapment mechanism: _____

Component(s): _____

(Note in vehicle interior diagram)

APPENDIX G

NASS Occupant Forms
(Vehicle #2)



OCCUPANT ASSESSMENT FORM

<p>1. Primary Sampling Unit Number _____</p> <p>2. Case Number Stratum <u>92-22</u></p> <p>3. Vehicle Number <u>02</u></p> <p>4. Occupant Number <u>01</u></p>	<p>11. Occupant Posture <u>0</u> (0) Normal posture (1) Abnormal posture (specify): _____ (9) Unknown</p>
OCCUPANT'S CHARACTERISTICS	
<p>5. Occupant's Age <u>29</u> Code actual age at time of accident. (00) Less than one year old (specify by month): _____ (97) 97 years and older (99) Unknown</p> <p>6. Occupant's Sex <u>1</u> (1) Male (2) Female (9) Unknown</p> <p>7. Occupant's Height <u>99</u> Code actual height to the nearest inch. (99) Unknown</p> <p>8. Occupant's Weight <u>999</u> Code actual weight to the nearest pounds. (999) Unknown</p> <p>9. Occupant's Role <u>1</u> (1) Driver (2) Passenger (9) Unknown</p> <p>10. Occupant's Seat Position <u>11</u> <i>Front Seat</i> (11) Left side (12) Middle (13) Right side (14) Other (specify): _____ (15) On or in the lap of another occupant</p> <p><i>Second Seat</i> (21) Left side (22) Middle (23) Right side (24) Other (specify): _____ (25) On or in the lap of another occupant</p> <p><i>Third Seat</i> (31) Left side (32) Middle (33) Right side (34) Other (specify): _____ (35) On or in the lap of another occupant</p> <p><i>Fourth Seat</i> (41) Left side (42) Middle (43) Right side (44) Other (specify): _____ (45) On or in the lap of another occupant</p> <p>(97) In or on unenclosed area (98) Other seat (specify): _____ (99) Unknown</p>	<p>EJECTION/ENTRAPMENT</p> <p>12. Ejection <u>0</u> (0) No ejection (1) Complete ejection (2) Partial ejection (3) Ejection, unknown degree (9) Unknown</p> <p>13. Ejection Area <u>0</u> (0) No ejection (1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear (7) Roof (8) Other area (e.g., back of pickup, etc.) (specify): _____ (9) Unknown</p> <p>14. Ejection Medium <u>0</u> (0) No ejection (1) Door/hatch/tailgate (2) Nonfixed roof structure (3) Fixed glazing (4) Nonfixed glazing (specify): _____ (5) Integral structure (8) Other medium (specify): _____ (9) Unknown</p> <p>15. Medium Status (Immediately Prior To Impact) <u>0</u> (0) No ejection (1) Open (2) Closed (3) Integral structure (9) Unknown</p> <p>16. Entrapment <u>0</u> (NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.) (0) Not entrapped (1) Entrapped (9) Unknown</p>

RESTRAINT SYSTEM AND SEAT EVALUATION**17. Manual (Active) Belt System Availability** 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown

18. Manual (Active) Belt System Use 0 0

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

(02) Shoulder belt

(03) Lap belt

(04) Lap and shoulder belt

(05) Belt used—type unknown

(08) Other belt used (specify): _____

(12) Shoulder belt used with child safety seat

(13) Lap belt used with child safety seat

(14) Lap and shoulder belt used with child safety seat

(15) Belt used with child safety seat—type unknown

(18) Other belt used with child safety seat (specify): _____

(99) Unknown if belt used

19. Proper Use of Manual (Active) Belts 0

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown

20. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown

21. Air Bag System Availability/Function 0

- (0) Not equipped/not available
- (1) Air bag

Non-functional

(2) Air bag disconnected (specify): _____

(3) Air bag not reinstalled

(9) Unknown

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Did Air Bag System Fail? 0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____

(9) Unknown

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 0

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): _____

(8) Restrained, type unknown

(9) Police indicated "unknown"

25. Head Restraint Type/Damage by Occupant at This Occupant Position 3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): _____

(9) Unknown

26. Seat Type (this Occupant Position) 05
- (00) Occupant not seated or no seat
 - (01) Bucket
 - (02) Bucket with folding back
 - (03) Bench
 - (04) Bench with separate back cushions
 - (05) Bench with folding back(s)
 - (06) Split bench with separate back cushions
 - (07) Split bench with folding back(s)
 - (08) Pedestal (i.e., column supported)
 - (09) Other seat type (specify): _____
 - (10) Box mounted seat (i.e., van type)
 - (99) Unknown

27. Seat Performance (this Occupant Position) 1
- (0) Occupant not seated or no seat
 - (1) No seat performance failure(s)
 - (2) Seat adjusters failed
 - (3) Seat back folding locks or "seat back" failed
 - (4) Seat track/anchors failed
 - (5) Deformed by impact of occupant
 - (6) Deformed by passenger compartment intrusion (specify): _____
 - (7) Combination of above (specify): _____
 - (8) Other (specify): _____
 - (9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 000
- (000) No child safety seat
- Applicable codes are found in your NASS CDS Data Collection, Coding and Editing
- (950) Built-in child safety seat
 - (997) Other make/model (specify): _____
 - (998) Unknown make/model
 - (999) Unknown if child safety seat used

29. Type of Child Safety Seat 0
- (0) No child safety seat
 - (1) Infant seat
 - (2) Toddler seat
 - (3) Convertible seat
 - (4) Booster seat
 - (7) Other type child safety seat (specify): _____
 - (8) Unknown child safety seat type
 - (9) Unknown if child safety seat used

30. Child Safety Seat Orientation 00
- (00) No child safety seat

Designed for Rear Facing for This Age/Weight

- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify): _____

- (09) Unknown orientation

Designed For Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify): _____

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify): _____

- (29) Unknown orientation

- (99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 00

32. Child Safety Seat Shield Usage 00

33. Child Safety Seat Tether Usage 00
- Note: Options below applicable to Variables OA31-OA33.
- (00) No child safety seat

Not Designed With Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

INJURY CONSEQUENCES34. Injury Severity (Police Rating) 3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 4

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):

(9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

(9) Unknown

37. Hospital Stay 00

- (00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 00

Code the number of days (up through 60) that the occupant lost from work due to the accident

- (00) No working days lost
- (61) 61 days or more *UNEMPLOYED*
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

39. Time to Death 00

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
- (97) Other result (specify):

(99) Unknown

43. Number of Recorded Injuries for This Occupant 01

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

AUTOMATIC BELT SYSTEM**44. Automatic (Passive) Belt System Availability/ Function** 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

45. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
- (3) Automatic belt use unknown
- (9) Unknown

46. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

47. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of automatic belt system (specify): _____
- (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other automatic belt failure (specify): _____
- (9) Unknown

49. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____
- (9) Unknown

TRAUMA DATA**50. Glasgow Coma Scale (GCS) Score** 02
(at Medical Facility)

- (00) Not injured
- (01) Injured - not treated at medical facility
- (02) No GCS Score at medical facility
- (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
- (97) Injured, details unknown
- (99) Unknown if injured

51. Was the Occupant Given Blood? 1

- (1) No - blood not given
- (2) Yes - blood given (specify units): _____
- (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO₃ 01

- (00) Not injured
- (01) Injured, ABGs not measured or reported
- (02-50) Code the actual value of the HCO₃
- (96) ABGs reported, HCO₃ unknown
- (97) Injured, details unknown
- (99) Unknown if injured

UPDATE CANDIDATE? NO ☒ YES ☐OCCUPANT INJURY FORM INCLUDED WITH INITIAL SUBMISSION? NO ☐ YES ☐

*** STOP HERE ***
 IF THERE ARE NO RECORDED INJURIES
 (I.E., OA43 = 00,97,99)



OCCUPANT INJURY FORM

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

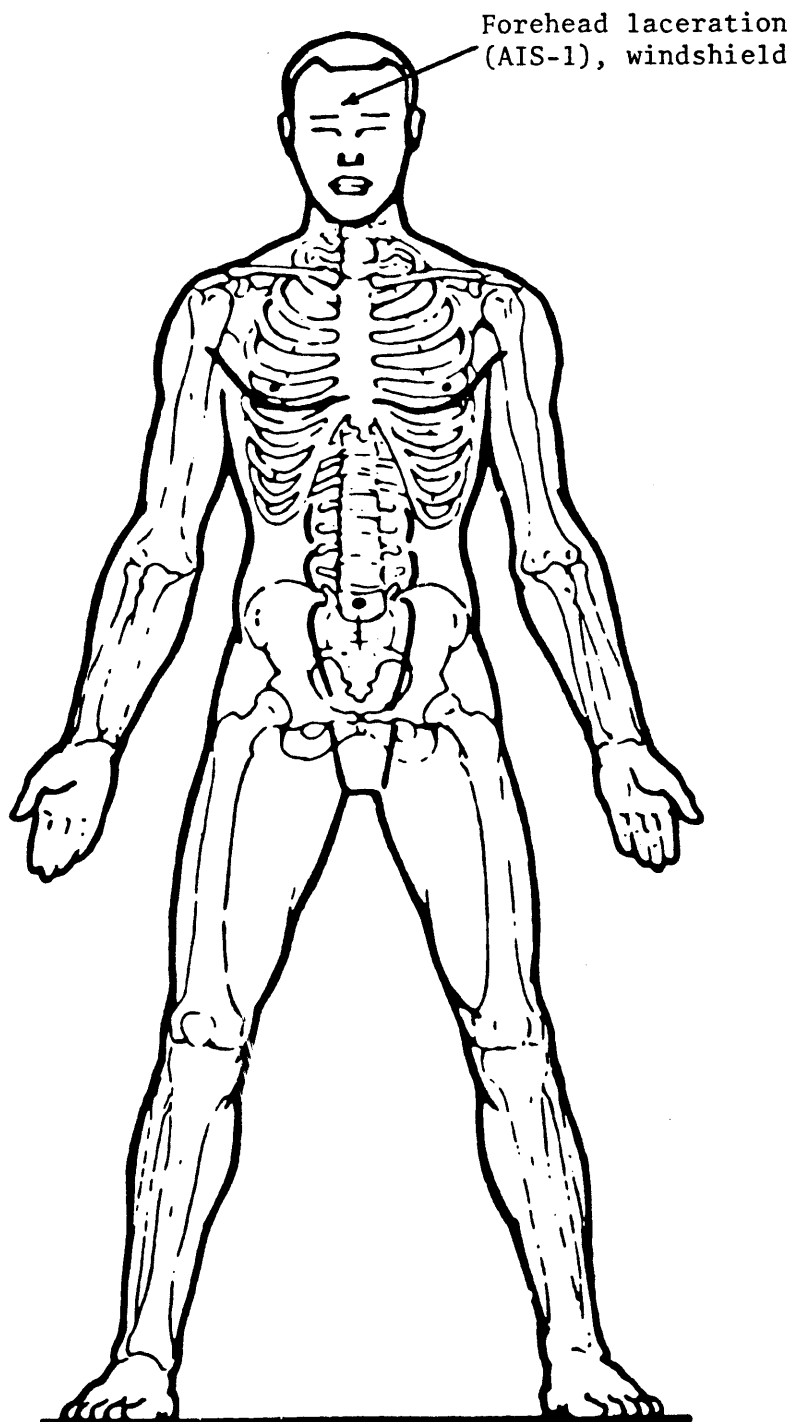
INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	O.I.C.-A.I.S					Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
		Body Region	Aspect	Lesion	System Organ	A.I.S. Severity				
1st	5. <u>7</u>	6. <u>F</u>	7. <u>S</u>	8. <u>L</u>	9. <u>I</u>	10. <u>1</u>	11. <u>01</u>	12. <u>1</u>	13. <u>1</u>	14. <u>00</u>
2nd	15. ____	16. ____	17. ____	18. ____	19. ____	20. ____	21. ____	22. ____	23. ____	24. ____
3rd	25. ____	26. ____	27. ____	28. ____	29. ____	30. ____	31. ____	32. ____	33. ____	34. ____
4th	35. ____	36. ____	37. ____	38. ____	39. ____	40. ____	41. ____	42. ____	43. ____	44. ____
5th	45. ____	46. ____	47. ____	48. ____	49. ____	50. ____	51. ____	52. ____	53. ____	54. ____
6th	55. ____	56. ____	57. ____	58. ____	59. ____	60. ____	61. ____	62. ____	63. ____	64. ____
7th	65. ____	66. ____	67. ____	68. ____	69. ____	70. ____	71. ____	72. ____	73. ____	74. ____
8th	75. ____	76. ____	77. ____	78. ____	79. ____	80. ____	81. ____	82. ____	83. ____	84. ____
9th	85. ____	86. ____	87. ____	88. ____	89. ____	90. ____	91. ____	92. ____	93. ____	94. ____
10th	95. ____	96. ____	97. ____	98. ____	99. ____	100. ____	101. ____	102. ____	103. ____	104. ____

OCCUPANT INJURY DATA

Source of Injury Data	O.I.C.-A.I.S					Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
	Body Region	Aspect	Lesion	System Organ	A.I.S. Severity				
11th	—	—	—	—	—	— — —	—	—	— — —
12th	—	—	—	—	—	— — —	—	—	— — —
13th	—	—	—	—	—	— — —	—	—	— — —
14th	—	—	—	—	—	— — —	—	—	— — —
15th	—	—	—	—	—	— — —	—	—	— — —
16th	—	—	—	—	—	— — —	—	—	— — —
17th	—	—	—	—	—	— — —	—	—	— — —
18th	—	—	—	—	—	— — —	—	—	— — —
19th	—	—	—	—	—	— — —	—	—	— — —
20th	—	—	—	—	—	— — —	—	—	— — —
21st	—	—	—	—	—	— — —	—	—	— — —
22nd	—	—	—	—	—	— — —	—	—	— — —
23rd	—	—	—	—	—	— — —	—	—	— — —
24th	—	—	—	—	—	— — —	—	—	— — —
25th	—	—	—	—	—	— — —	—	—	— — —



AGE 29
SEX Male
WT.
HT.

SOURCE OF INJURY DATA**OFFICIAL**

- (1) Autopsy records with or without hospital medical records
- (2) Hospital medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____
- (9) Police

INJURY SOURCE**FRONT**

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify): _____

- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail.

- (27) Other left side object (specify): _____

- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests

- (31) Right side hardware or armrest

- (32) Right A pillar

- (33) Right B pillar

- (34) Other right pillar (specify): _____

- (35) Right side window glass or frame

- (36) Right side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.

- (37) Other right side object (specify): _____

- (38) Right side window sill

INTERIOR

- (40) Seat, back support

- (41) Belt restraint webbing/buckle

- (42) Belt restraint B-pillar attachment point

- (43) Other restraint system component (specify): _____

- (44) Head restraint system

- (45) Air bag

- (46) Other occupants (specify): _____

- (47) Interior loose objects

- (48) Child safety seat (specify): _____

- (49) Other interior object (specify): _____

ROOF

- (50) Front header

- (51) Rear header

- (52) Roof left side rail

- (53) Roof right side rail

- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)

- (57) Floor or console mounted transmission lever, including console

- (58) Parking brake handle

- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.

- (62) Other rear object (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

- (65) Hood

- (66) Outside hardware (e.g., outside mirror, antenna)

- (67) Other exterior surface or tires (specify): _____

- (68) Unknown exterior objects

EXTERIOR of OTHER MOTOR VEHICLE

- (70) Front bumper

- (71) Hood edge

- (72) Other front of vehicle (specify): _____

- (73) Hood

- (74) Hood ornament

- (75) Windshield, roof rail, A-pillar

- (76) Side surface

- (77) Side mirrors

- (78) Other side protrusions (specify): _____

- (79) Rear surface

- (80) Undercarriage

- (81) Tires and wheels

- (82) Other exterior of other motor vehicle (specify): _____

- (83) Unknown exterior of other motor vehicle

OTHER VEHICLE or OBJECT IN THE ENVIRONMENT

- (84) Ground

- (85) Other vehicle or object (specify): _____

- (86) Unknown vehicle or object

NONCONTACT INJURY

- (90) Fire in vehicle

- (91) Flying glass

- (92) Other noncontact injury source (specify): _____

- (93) Air bag exhaust gases

- (97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain

- (2) Probable

- (3) Possible

- (9) Unknown

DIRECT/INDIRECT INJURY

- (1) Direct contact injury

- (2) Indirect contact injury

- (3) Noncontact injury

- (7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION**O.I.C. Body Region**

- (M) Abdomen
- (Q) Ankle-foot
- (A) Arm (upper)
- (B) Back-thoracolumbar spine
- (C) Chest
- (E) Elbow
- (F) Face
- (R) Forearm
- (H) Head-skull
- (U) Injured, unknown region
- (K) Knee
- (L) Leg (lower)
- (Y) Lower limb(s) (whole or unknown part)
- (N) Neck-cervical spine
- (P) Pelvic-hip
- (S) Shoulder
- (T) Thigh
- (X) Upper limb(s) (whole or unknown part)
- (O) Whole body
- (W) Wrist-hand

Aspect of Injury

- (A) Anterior-front
- (B) Bilateral (rib fracture only)
- (C) Central
- (I) Inferior-lower
- (U) Injured, unknown aspect
- (L) Left
- (P) Posterior-back
- (R) Right
- (S) Superior-upper
- (W) Whole region

Lesion

- (A) Abrasion
- (M) Amputation
- (V) Avulsion
- (B) Burn
- (K) Concussion
- (C) Contusion
- (N) Crush
- (G) Detachment, separation
- (D) Dislocation

- (F) Fracture
- (Z) Fracture and dislocation
- (U) Injured, unknown lesion
- (L) Laceration
- (O) Other
- (P) Perforation, puncture
- (R) Rupture
- (S) Sprain
- (T) Strain
- (E) Total severance, transection

System/Organ

- (W) All systems in region
- (A) Arteries-veins
- (B) Brain
- (D) Digestive
- (E) Ears
- (O) Eye
- (H) Heart
- (U) Injured, unknown system
- (I) Integumentary
- (J) Joints
- (K) Kidneys

- (L) Liver
- (M) Muscles
- (N) Nervous system
- (P) Pulmonary-lungs
- (R) Respiratory
- (S) Skeletal
- (C) Spinal cord
- (Q) Spleen
- (T) Thyroid, other endocrine gland
- (V) Vertebrae

Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Lesion, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

